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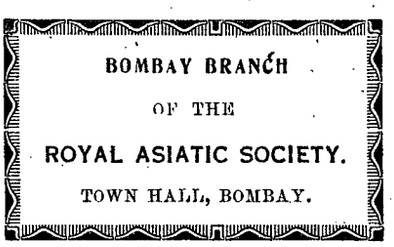

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EAST INDIA (PROGRESS AND CONDITION).

STATEMENT

EXHIBITING THE

MORAL AND MATERIAL PROGRESS AND CONDITION

OF

INDIA

DURING THE YEAR 1916-17

FIFTY-THIRD NUMBER.

134467

Presented to Parliament by Command of His Majesty.

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NOTE.

This report appears for the first time in the present form. It has been, and will in future be, prepared by the Government of India.

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REPORT.

INTRODUCTORY CHAPTER.

Preliminary.—The record of the moral and material progress of India must be sought in the history of the administration and development of individual provinces. The problems of Government, social, economic and administrative, vary widely in different areas, nor is the rate of advance by any means uniform in all. It is accordingly difficult to take a comprehensive survey of Indian progress within the narrow limits of a single year, and we have thought it best to set forth the great part of the year's report in the provincial chapters which follow, and to confine this introductory chapter to a few general remarks, together with a brief account of those branches of the administration, as for instance military matters, for which the central Government of India is solely responsible. A separate chapter deals with Imperial as distinct from provincial finance, and another contains a list of the laws and ordinances passed during the year.

The war.—2. Indian affairs, like those of most countries, continue to be dominated both directly and indirectly by the war. It will be as well, therefore, to describe briefly the part played by the Government and the country in the universal struggle during the year under report—a part which is perhaps greater and worthier than is generally ascribed to India.

Recruiting.—3. The first and most important obligation is the supply of trained men for the forces of the Empire. During the year recruiting for the regular armies continued vigorously among the fighting races of India. In addition to the very heavy drain of men required for the reinforcement of existing Indian units in all the various theatres of war, no less than 13 fresh battalions of Indian Infantry were placed at the disposal of the War Office for service in Mesopotamia; 12 new battalions were raised and 12 more existing battalions, the bulk of which had been captured at the fall of Kut, were reformed and brought up to strength in India. Three new Indian battalions were furnished to Egypt. A Royal Field Artillery battery of Anglo-Indians was formed and despatched for service to Mesopotamia, and various new Sapper and Miner and Signal units were raised, the strength of existing units being at the same time increased. The establishments of Indian cavalry regiments were raised to 800 Indian ranks, and 796 horses and camels, and depôts were raised to 275 Indian ranks each. In order to facilitate the recruitment and supply of followers for service with field forces overseas, central depôts were established at Meerut, Kirkee and Lucknow. Central reserve depôts from which departmental and regimental followers could be furnished for service overseas were also formed at Meerut and Ahmedabad. Six labour and three porter free corps were raised for service in Mesopotamia, and we accepted the liability to find 50,000 labourers for France. It must be remembered in this connection that there is a serious shortage of labour in India itself which has greatly hampered certain important industries especially coal. Thirty-five new transport units (mule, bullock, pony and camel) were formed, and, with the exception of some mules, all animals have been obtained in the country. Two Indian Mechanical Transport companies were raised and equipped. In order to expedite the enrolment of recruits and save the trouble of sending them to a station where there was a medical officer residing and of returning them to their homes if rejected, instructions were issued that medical officers should, when possible, accompany recruiting officers on recruiting duty.

With a view to stimulating recruiting for the Indian Army, so as to maintain the supply of recruits required to make good the wastage in the field and to admit of the formation of new units, it became necessary to offer improved terms of service. It was accordingly decided to increase the pay of Indian ranks except sepoys, sowars, gunners and sappers, and at the same time to grant free rations to all Indian ranks, including the above. This concession was announced on the 1st January 1917. Pending the completion

of arrangements for the supply of rations, a temporary ration allowance of two rupees a month was granted to all combatant ranks in India not on furlough or leave, and not already in receipt of free rations with effect from the same date.

The Indian Defence Force.—4. Towards the end of the year the Indian Defence Force was constituted under a special Act of the Imperial Legislative Council. The object of this measure was a more extensive use of volunteers and other European British subjects resident in the country to replace regular troops on internal security dispositions, and to release British troops for service overseas. Enrolment was made compulsory for all European British subjects in India between the ages of 16 and 50, those between the ages of 18 and 41 being liable for military service anywhere in India and those above the age of 41 for local military service. At the same time the Act provided for persons other than European British subjects who should offer themselves for general military service to be enrolled in the local corps specially constituted. This part of the measure, especially, was hailed with approval by all sections of Indian opinion, as granting an opportunity to Indians to take part in home defence without liability for service overseas. The response, however, was somewhat disappointing.

The Indian Defence Force is now in full swing but the Act did not come into practical operation until after the close of the year under report.

Training of officers.—5. The expansion of His Majesty's forces in India, and the necessity for replacing casualties among commissioned officers on active service have necessarily resulted in an enormous increase in the demand for trained officers of that class. The demand has been met in two ways, by the establishment of cadet colleges and training schools and courses for training, and by the recruitment of civil officers of Government and non-official gentlemen into the Indian Army Reserve of Officers.

In the first connection cadet colleges were established at Quetta and Wellington for training cadets from England before entering the Indian Army. Classes of instruction for non-commissioned officers of Territorial battalions in India to be trained in drill and field duties up to the leading of a platoon were formed at Secunderabad and Kuldana. A class was also formed at Abbottabad for the instruction of selected officers and non-commissioned officers of Territorial battalions in mountain warfare. A staff school was established at Mhow for the instruction of selected officers in staff duties in war in the appointments of General Staff officers, second and third grade, Deputy Assistant Adjutant Generals, Brigade-Majors and Staff Captains. A school to hold a hundred and fifty young officers previously attached for three months to a British unit in India was opened at Ambala in February 1917. In the same school were also incorporated classes for the training of officers on first appointment to the Indian Army Reserve of Officers. A cadet school was opened at Sialkot for the training of non-commissioned officers who were candidates for commissions. During the winter of 1916-17, a school of gunnery was held at Akora, and co-operation between artillery and aeroplanes was also practised. A machine gun training centre was established at Campbellpore, and a bombing school at Lahore.

The Indian Army Reserve of Officers.—6. Recruitment for the Indian Army Reserve of Officers continued apace, and the total number of that establishment are now approximately 3,500—a very creditable figure in view of the comparative numerical paucity of the European officers of Government and the commercial community from which two classes the reserve is almost entirely drawn—as a consequence of the large number of young civil officers who have been permitted to join the reserve during the year under report, and subsequently the shortage in the junior ranks of the administration in all its branches has now probably reached the last degree compatible with safety and efficiency. References to this shortage will be found in some of the provincial chapters, and there is no doubt that the position is the same all over the country. It must be remembered that the tendency in the various civilian services in India even in normal times is towards under—rather than over—manning, and that the war has not in any way diminished but has on the contrary increased the work and responsibilities of the administration.

Medical administration in war time.—7. The year was marked by an unprecedented and almost unlimited growth in military medical administration. There is not space in this report to record in detail the list of new hospitals instituted or taken over by Government, the great expansion of many existing hospitals, the large number of fresh medical units established for service overseas or in India itself, the immense additions made to *personnel* and equipment, and the special preventive measures organized against infectious and epidemic diseases, flies, heat, glare, and other discomforts incidental to campaigning in the East. We can mention here only two matters of particular interest. The first is a new departure in the foundation of orthopædic institutes for the treatment of wounded and disabled soldiers. A large and very fully equipped institute of this kind is being established at Dehra Dun, and the King Edward Hospital at Cawnpore has also been taken over for conversion into a special orthopædic hospital for Indian soldiers. Another such institute has been founded in Bombay. The second matter is the increasingly difficult problem of providing trained medical officers. The civil side of the Indian Medical Service is not only the Government channel of medical administration and instruction for the whole of India but it forms also the reserve of medical officers for the Indian Army on mobilization. All Indian Medical Service officers liable to surrender from civil employ were returned to the Army in the very early stages of the war, and many others not technically liable were returned with or soon after them. Only the barest minimum of officers was retained to occupy the most important of the administrative and executive charges, and to maintain at full working pressure the medical schools and colleges on which practically the whole supply of medical practitioners, official and non-official, in this country depends. Even so the numerical strength of the service proved far below military demands, and has had to be supplemented by the grant of temporary commissions to numbers of civil assistant surgeons and private practitioners. Still greater difficulties beset the provision of subordinate medical officers for the Army. Exceptionally favourable terms have been offered to induce civil sub-assistant surgeons to enter military employ, but the number of candidates is still far short of requirements. On the other hand, there is a point beyond which the medical needs of the vast population of India cannot be sacrificed and we have every reason to believe that the response already made to military demands has reduced the available medical *personnel* in most provinces to that point. Government has in this matter a responsibility to the civil population of India which it must discharge, and were a wide-spread increase of plague or other epidemic to find it unprepared and inadequately equipped, the consequences would be disastrous.

Indian Munitions Board.—8. The Indian Munitions Board was created as a department of the Government of India from the 1st March 1917 to control and develop Indian industries with special reference to the needs of the war, to regulate contracts, to limit and co-ordinate demands for articles not manufactured or produced in India and to apply the manufacturing resources of India to war purposes with the special object of reducing demands on shipping. The activities and rapid expansion of this department belong, however, to the period following that now under report.

Voluntary and private aid towards the war.—9. No account of India's contributions towards the war during the year would be complete without some mention—it would be impossible to give a statement—of the immense contributions in labour, money and materials voluntarily supplied by the Princes and people of India. A great part of the donations made and of the regular subscriptions and contributions instituted, dates from the years 1914 and 1915. But during the year 1916-1917 the generosity and enthusiasm of all, from the highest to the lowest, showed no signs of flagging. An attempt was made in 1916 to calculate very roughly the amount of aid of all kinds voluntarily given since the outbreak of war, but even such figures as were collected only represented those contributions which had passed through some Government channel, or had been formally made to Government, as, for instance, the liberal gifts of the Ruling Chiefs. Reference will be found in the provincial narratives to the contributions in troops, funds and in kind literally poured out by the last mentioned, and hardly a day passed but some new and muni-

ficent gift from one or other Chief testifies to the continual and devoted loyalty of that class. Of the various funds we may mention the following (the figures represent the sums received, so far as could be ascertained, up to the autumn of 1916.)

	Sums received. £
1. Imperial Indian Relief Fund	829,875
2. St. John's Ambulance Association—	
in cash	91,000
in kind	127,000
3. Bombay War Relief Fund	313,000
4. Madras War Fund	288,000
5. United Provinces War Fund	200,000
6. Punjab Aeroplane Fund	100,000
7. Calcutta Motor Ambulance	45,000
8. Bhagalpur Motor Ambulance Fund (Subscribed by the inhabitants of the districts of the Bhagalpur Division)	17,800
9. Bengali Hospital Flat	8,700
10. Belgian Relief Fund in India	27,000
11. Gifts from Ruling Chiefs (exclusive of other items above)—	
in cash	1,190,000
in kind (roughly estimated)	200,000

Details of such aid as the loan of houses for hospitals, for convalescent homes, and of all kinds of voluntary war work, are not available, but most generous and wide-spread assistance of this kind has been received. Towards the end of the year under report a letter appeared in the "Times" from Lady Chelmsford which gave an account of the organization and activities of the various Comforts for Troops Funds, now co-ordinated with the Central Indian Comforts for Troops Fund, and of the Red Cross Fund in India. The facts brought to light in that letter must have dispelled any idea that may have prevailed in England—and there is reason to believe that such ideas did exist—that private charity towards war purposes was not forthcoming in India, or that the ladies of this country, Indian and English, did not take their share in voluntary war work.

Agricultural Conditions.—10. Of matters not directly connected with the progress of the war, the most important to the vast majority of the population is agriculture. In this respect the year was a good one and except for a certain amount of local scarcity in Bankura and Tippera districts in Bengal, the Manbhum and Singhbhum districts of Bihar and Orissa, in Ajmer-Merwara, in Kathiawar, Bombay and in the Karauli and Kishengarh States in Rajputana, there was practically no agricultural distress during the year. Famine was actually declared in one of these tracts only, namely, an area of 2,621 square miles in the Bankura District of Bengal, the maximum numbers on relief works and gratuitous relief being 22,558 and 25,724 in June and May, respectively. A good monsoon improved the situation and by November relief measures were closed in all the affected areas. Special railway concessions were granted for the carriage of fodder in the Punjab, Delhi, Rajputana, Ajmer-Merwara and Bombay and an experiment was made of granting a similar concession for the transfer of cattle by rail from Ajmer-Merwara, but little advantage was taken of it. A special officer was appointed during the year to investigate the actual working of the system of granting reduced railway rates for the carriage of fodder during times of fodder scarcity, to point out its chief defects, and to suggest the means of avoiding them in future. His report has now been received and is under examination.

The provincial Governments have their own agricultural departments and colleges. Remarks on the progress of the agricultural instructions and research will be found accordingly in the provincial chapters of this report. The Government of India have also an Agricultural Research Institute at Pusa in Bihar, where experimental and demonstration work is carried on. The Pusa wheats are rapidly replacing country varieties in many tracts, especially in the United Provinces, where the area under these types has risen to a hundred thousand acres.

As a consequence of the stoppage of supply of German dyes, the cultivation of indigo has been very greatly resuscitated, and efforts are now being made to place natural indigo in a position to compete with the synthetic product. An Indigo Research Chemist has been appointed temporarily to the staff of the Imperial Department of Agriculture in India for employment on research work in connection with the manufacture, standardization and purification of indigo. A committee representative of expert knowledge in England has been formed for the purpose of providing the Chemist with expert criticism on his results and guidance in his investigations. About half a ton of indigo paste containing 18·75 per cent. of indigotin has been prepared by the Chemist and shipped to England for trial by dyers.

Among fibre crops, the type of jute isolated by the Fibre Expert in Bengal has from various trials been proved to possess heavier yielding powers than those of local varieties, and arrangements are being made to organize agencies for the growing and distribution of its seed in jute growing districts. All sections of the jute industry are co-operating with the department in the improvement of the crop.

The Scientific Department of the Indian Tea Association continued to do excellent work and the annual grant of ₹15,000 to the Association towards the maintenance of this Department was renewed for a further period of five years.

There is a consensus of opinion that meetings of agricultural experts from the various parts of India should be more frequent than at present, and the question of holding more frequent meetings of workers on particular branches of agricultural science has been referred to the Board of Agriculture in India. As an experiment, a meeting of Mycologists and Entomologists was held at Pusa in February 1917. The experiment proved to be a success; the meeting was largely attended, and much useful work was done.

Irrigation.—11. Closely allied to agriculture is the subject of irrigation, which is, however, dealt with in the provincial chapters. We invite attention specially to paragraph 6 of the Punjab chapter, which gives an outline of the progress in irrigation made in that province. The total expenditure on productive irrigation works in the year under report was ₹76,81,248, or £512,083. It may be convenient here to mention the chief irrigation schemes now under construction or consideration. They are—

(*a*) In Madras the Cauvery Metur Reservoir Project is under consideration. It is estimated to cost 409·5 lakhs of rupees and is designed to secure 371,000 acres of new irrigation while affording complete control over the present fluctuating supplies to the million acres already irrigated in the Cauvery delta.

(*b*) In Bombay the Nira Right Bank Canal and the Pravara River Canal Project, estimated to cost 258 and 127 lakhs respectively, are under construction. When completed they will add some 275,000 acres to the irrigated area of the Presidency and will protect tracts at present peculiarly liable to famine. A project for the construction of a barrage across the Indus at Sukkur with the object of converting the existing inundation canals in Sind into perennial canals is also in course of preparation.

(*c*) In the United Provinces the Sarda Canal Project is under consideration. This system entails the construction of 5,000 miles of channels, is designed to irrigate nearly $2\frac{1}{4}$ million acres and is estimated to cost 857 lakhs of rupees.

(*d*) In the Punjab four large projects are being examined. The Sutlej Valley Project is expected to irrigate about 3 million acres (of which 1·7 million will be new irrigation) at a cost of 990 lakhs of rupees. The Haveli Project has been prepared with a view to securing new irrigation, to the extent of about 200,000 acres, in precarious tracts on either bank of the Chenab river, below its confluence with the Jhelum, and to improving the existing Multan inundation canals, the cost of the scheme being estimated at 165 lakhs of rupees. The Sind-Sagar Project is under investigation with the object of bringing the Sind-Sagar

desert under cultivation by means of canals from the Indus, while the Bhakra dam scheme is being prepared to utilize the surplus flood water of the Sutlej in the precarious districts of Rohtak and Hissar. These are all projects of the first magnitude and, if constructed, will increase the area under irrigation in the Punjab by nearly 5 million acres, while improving the supplies of several existing canals, at a total capital cost of about £18⅓ million sterling.

(*e*) In Burma, a project for the embanking of the left bank of the Irrawaddy, estimated to reclaim about 500,000 acres of land, to cost about 62 lakhs of rupees, and to yield a net revenue of nearly R13 lakhs.

The Industrial Commission.—12. Turning to trade and industries, we have first of all to record an event of the first importance in May 1916, when a Commission was appointed to examine and report upon the possibilities of further industrial development in India. The specific points of reference were—

(*a*) Whether new openings for the profitable employment of Indian capital in commerce and industry can be indicated.

(*b*) Whether, and if so, in what manner Government can usefully give direct encouragement to industrial development—

(1) by rendering technical advice more freely available;

(2) by the demonstration of the practical possibility, on a commercial scale, of particular industries;

(3) by affording, directly or indirectly financial assistance to industrial enterprises; and

(4) by any other means which are not incompatible with the existing fiscal policy of the Government of India.

Sir Thomas Holland, who was appointed President of the Commission, arrived in India early in May 1916 and was engaged on preliminary work until the following October when the Commission assembled in Delhi. They toured through India in the winter of 1916-17, but did not complete their labours that season. In November 1917, they re-assembled in Bombay, and are expected to submit a report in the spring of 1918.

External trade—Jute, tea and coffee.—13. The steps taken in the United Kingdom to secure economy of tonnage were severely felt in some quarters in India, though the situation became acutest after the close of the year under report. The raw jute and tea trades suffered to some extent and the coffee trade heavily; but the jute industry has since been considerably helped by the introduction of a system for purchase of the raw jute required by the War Office and by re-opening exports on private account to the United Kingdom, and the tea trade is now in a more secure position as all the tea required for consumption in the United Kingdom will in future be obtained from India and Ceylon, while Australia has prohibited the import of all foreign tea. A special Controller has now been appointed in India for the tea trade. The importation of foreign coffee into India has been prohibited and certain other measures have been suggested to His Majesty's Government for the assistance of the coffee trade.

Salt and coal.—14. The shortage of shipping re-acted also on two other considerable trades, namely, salt and coal. The great decrease in the normal imports of foreign salt encouraged speculation in salt and this forced up prices to an abnormal height. We have since taken powers which will enable them to improve the distribution of salt manufactured in India by giving preference to the indents of local authorities or other agencies selected by local Governments as against the speculative dealers. Measures on these lines were first taken in the year under report by the Government of the Punjab where depôts were opened by local authorities for the distribution of salt at cost prices. We are now taking all possible steps to increase local output of salt and additional plant is being installed in the great Mayo salt mines at Khewra.

The production and distribution of coal was seriously affected by the exceptional demands for naval purposes and for essential industries and by the cessation of the coastwise carriage of coal from Calcutta to Bombay and Karachi. At the same time the labour position at the coal fields was exceptionally difficult both in 1916 and 1917 and raisings were curtailed in consequence. It, therefore, became necessary, in order to provide full supply of coal for certain industries, to prohibit the export of coal and coke except under a license and to requisition the supplies of all first-class coal under the Defence of India Act, 1915. In December 1916, an executive committee was appointed in Calcutta and empowered to issue instructions to the railways with regard to the supply of wagons at the coal mines, and in this manner was enabled to regulate the supplies of coal to private consumers in accordance with the recommendations of authorised commercial bodies, such as Chambers of Commerce, through whom all indents for coal had to be passed.

Indentured Labour.—15. During the year, His Majesty's Government accepted the recommendation of the Government of India to abolish indentured emigration of Indians to the Colonies. After the close of the year, in June 1917, an inter-departmental Conference, at which we were represented, was held in London, to devise an alternative system. The Conference in its report has formulated a scheme of assisted emigration, the cardinal feature of which is the prominence given to provisions for encouraging the settlement of Indians in the Colonies concerned under favourable conditions and with the same political rights as the other inhabitants. The scheme is still under our consideration.

Production of commodities required for purposes of war.—16. During the period under review we were much occupied with increasing the production in India of materials needed in connection with the war and with the regulation of their shipment to the necessary destinations. Special measures have been taken to secure an increased supply of mica, wolfram and saltpetre.

The output of saltpetre was greatly stimulated by the increase of price and the very satisfactory total of 21,777 tons was produced in the year 1916. The prices of saltpetre are, in the interests of His Majesty's Government, restricted to maximum rates.

The increased production of wolfram entailed development work in very difficult country, the attraction of new capital and the gradual improvement of mining methods. The Government of Burma took the work vigorously in hand with the assistance of officers in the Geological Survey, with very good results. The rate of output has more than doubled, and, the amount produced in 1916 was no less than 3,806 tons

The main problem in the case of mica has been to secure a greatly enhanced output of certain comparatively uncommon grades. The first measure taken was to appoint Messrs. Chrestien and Company of Kodarma in Bihar and Orissa as Government agents for the selection and purchase of the higher grades of mica ; and it was provided that no such mica should be exported save through the Government agents, while exports of mica of lower grades were limited to approved consignees mainly in the United States. These measures, however, were not sufficient to secure the quantities required. Consequently the export of mica except to the United Kingdom was prohibited in order to prevent the leakage of higher grade mica and since March 1917 the Government of Bihar and Orissa have taken measures of development similar to those adopted in the case of wolfram. Trade with the United Kingdom is now open, but the local Government have taken under their direct control the production of mica in some of the most productive areas.

A special officer was appointed to arrange for the purchase and shipment to Europe of wheat and hides and the Director-General, Commercial Intelligence was placed in special charge of the arrangements in connection with sandbags, raw jute and shellac.. Effect has now been given to an important scheme for the purchase of rice in Burma and its shipment to the United Kingdom.

The control over the import and export of goods to and from British India is exercised under the Import and Export Goods Act, XI of 1916, which was passed for this purpose. The restrictions imposed in the earlier stages of the war were aimed chiefly at preventing supplies from reaching the enemy. More

recently the object has been in most cases to conserve supplies for Britain and her allies or to retain in India the commodities which are required for the production locally of war supplies.

Opium.—17. Before the war our opium with its low morphine content had little chance of competing in the market for the manufacture of morphia; but in 1915, on the cessation of the supplies from the Ottoman Empire, a demand sprang up in London for the Indian commodity and the export to England has now reached considerable dimensions. A profitable and legitimate outlet will be secured for Indian trade if Turkey can be ousted permanently from her predominance in the market for medical opium, and investigations, which already promise success, have therefore been started for improving the morphine content of our opium.

The policy of supplying opium direct to the Governments of importing countries in the Far East instead of selling it by auction to private traders was steadily pursued; a larger measure of control over the trade in the non-China markets is thereby secured. A five-yearly agreement was concluded with the Netherland Indies similar to those made towards the end of Lord Hardinge's Viceroyalty with the Governments of Hongkong and the Straits Settlements, while at the close of the year negotiations which shortly afterwards terminated successfully were in progress for the ratification of similar agreements with Siam and British North Borneo. The internal control of opium production was also facilitated by the co-operation of the Gwalior and Indore Darbars, and of some of the smaller Darbars in the Malwa opium-producing tract, in a scheme for the direct supply to Government of opium obtained from that area.

Regulation of shipping.—18. The increasing shortage of freight and the concentration of manufactures in the United Kingdom on war supplies has rendered it more and more difficult for India to obtain her normal requirements of manufactured articles from that country. At the same time there has been equal difficulty in meeting the demands of countries bordering on the Indian Ocean which are in part dependent on India for supplies. Great importance, therefore, is attached to measures for the better regulation of shipping in Indian waters. During the year under report we had chiefly to consider how the tonnage taken up for military purposes might be economized and used to the greatest possible advantage and with the least possible interference to trade. For this purpose Advisory committees were established at Bombay, Calcutta, and Rangoon to assist in avoiding waste of tonnage and unnecessary interference with shipping. But as the shortage of ships became worse and as a result of the measures taken by the newly established Shipping Controller in England, our line of action had to be changed and it became very desirable to centralize the control of purely commercial shipping in Eastern waters in a single officer, who should act in India as agent and deputy to the Shipping Controller. Recommendations to this effect were made and accepted. These events do not, however, belong to the year under review.

Enemy trading.—19. Reference may here be made to the action taken against hostile trading interests. In July 1916, the Enemy Trading Ordinance gave Government wide powers in regard to firms of hostile constitution or associations, and under these powers rules were issued prescribing the method in which enemy business concerns were to be wound up. In September 1916, this Ordinance was re-enacted with certain conditions as Act XI of 1916. Steps were taken to eliminate completely those firms which contained a considerable hostile element and to apply stricter control, when necessary, in cases where winding up order did not appear to be advisable. 143 firms were wound up and 14 were permitted to trade under stricter conditions. The amount of enemy property held in India has been investigated and as a result we have been able to vest in the Custodian of Enemy Property a large amount of property in which it was considered undesirable that enemies or hostile foreigners should retain any interest.

Railways.—20. The progress of railway construction was necessarily affected in the period under review by financial considerations and by the difficulty in procuring materials. The majority of the extensions which it was found possible to proceed with were financed either by Branch Line Companies

or Native States. The gross earnings of all Indian Railways during the year 1916-17 amounted to R7,068·42 lakhs (between £46 and 47 millions) against R6,466·04 lakhs in the provious year or an increase of R602·38 lakhs (about £4 millions) while the working expenses were R48·37 lakhs more than 1915-16. The net earnings amounted to R3,728·10 lakhs (between £24 and 25 millions) against R3,174·09 or an increase of R554·01 lakhs (about £3,700,000) and yielded a return of 6·96 per cent. against 5·99 per cent. in the previous year. The large increase in the gross earnings was chiefly due to the movement of troops and special traffic in grain and coal on account of the war and the comparatively small increase in the working expenses principally to the temporary interruption of ordinary renewals consequent on the difficulties in procuring materials. During the year 1917-18 gross earnings continued to expand.

Of 690 miles of railways opened only about a fifth was financed by Government, the outlay being devoted entirely to urgent works in connection with lines in progress before the war. The most important lines opened were the Sara-Sirajgang Railway (52·93 miles), the Laki-Pezu-Tank Railway and the Burdwan-Howrah Chord of the East Indian Railway, 55½ miles.

During the period ending 31st December 1917 it was again found necessary to restrict expenditure on open line improvements for financial reasons, while at the same time the choice of works on which the available funds should be spent was seriously hampered by the difficulty of obtaining materials. For the same reason no large programme of renewals has been taken in hand during the period.

The question of the construction of a permanent harbour at Vizagapatam has been under discussion intermittently for the past 58 years. There is at present on the long coast line between Madras and Calcutta no port at which vessels of large size can take shelter at all seasons of the year. Moreover, the development of a large tract of country lying to the south of the Nagpur-Khargpur section of the Bengal-Nagpur Railway has been retarded, owing to the want of convenient access to a first class port. Vizagapatam was indicated as the most convenient site, as the natural conditions there are eminently adapted to the construction of an internal protected harbour. The Bengal-Nagpur Railway accordingly have, with the sanction of the Secretary of State, had a project prepared for the improvement of Vizagapatam harbour. This project is roughly estimated to cost R60 lakhs. Detailed estimates are in course of preparation. It is noteworthy that the port will be constructed and directly controlled by the Railway Company.

The outstanding feature of the period has been the difficulty of transporting all the traffic which Indian railways were asked to carry. Soon after the outbreak of war, the difficulty of obtaining shipping for the coastwise trade steadily increased until the whole of this traffic, a very considerable portion of which consisted of coal, had to be carried by railways. In the spring of 1917 the difficulties in regard to the movement of traffic were further accentuated by the heavy demands made on behalf of Government for the transport of wheat and other essential food grains for export to the United Kingdom. The Railway Board have since appointed a " Controller of Traffic ", whose duties are to take such steps on behalf of Government as will result in the most economical use of the limited transport available on railways, and to control traffic over railways in the best interests of national and general purposes.

In view of the practical impossibility of obtaining sufficient supplies of railway material from England, the reduction of passenger train services in India became imperative. Certain mail and a large number of passenger trains have been reduced, all possible measures being adopted to minimise the inconvenience caused to the public.

The development of military operations in Eastern Theatres involved increasing contributions of permanent-way materials, rolling-stock, plant and equipment from Indian Railways, and, in addition to the Mesopotamian, East African and Aden fronts, for which India was the base of supply for railway materials, considerable quantities of permanent-way and sleepers were supplied to Egypt. Railway workshops continued to be extensively employed on the provision of ambulance trains and munitions of war of various classes.

The scarcity of materials for the maintenance of railways and rolling-stock has been a matter of considerable anxiety and as already stated led to the necessity of reducing train services early in 1917. The standard of maintenance also had to be lowered in several respects, and the result has been some considerable deterioration in the equipment of railways.

The New Capital.—21. The expenditure on new Delhi for the year 1916-17 amounted to about ₹40 lakhs, or ₹10 lakhs less than in 1915-16. The saving was attained by a smaller work programme and a considerable reduction in the engineering staff. The aim during the year was to leave untouched the larger schemes which require the use of fresh imported materials but to continue such work on the central buildings and other features of the new city as could be carried on without the use of materials which had become difficult or expensive to procure owing to the war, and to maintain the output of brickfields and quarries and the preparation of sites and roads. A moderate rate of progress was maintained in the construction of Government house, the Viceroy's Court, the Secretariats and the Great Palace. It was definitely decided in the course of the year, with the concurrence of His Majesty's Secretary of State, that no material part of the project of new Delhi should be abandoned as a consequence of the war, but that the whole scheme should be carried to its conclusion substantially on the lines already approved by His Majesty's Government. The rate of progress however must inevitably be delayed to a very great degree by the conditions arising out of the war.

Constitutional reform.—22. We turn from material to moral progress and conditions. The question of constructive constitutional reform with the object of enabling Indians to take a larger and ever increasing share in the government of their country, had occupied for some few years past, the attention of officials no less than of politicians. If there were any doubts that the time was not yet ripe for a considerable advance in this direction, such doubts must have been set at rest by the events of the war in which the loyalty and worth of India, as a whole, have been so spontaneously and efficiently displayed. Lord Chelmsford, the first year of whose Viceroyalty synchronizes exactly with the period covered by this report, took up the question from the outset of his term of office, and we were occupied throughout the summer of 1916 in considering and devising lines along which we could propose an immediate advance in the constitutional development of India. Towards the end of the year we embodied our conclusions in a despatch to the Secretary of State. The contents of that despatch and the details of our recommendations have not been made public, but the despatch and the deliberations which preceded it have already borne their fruit, in the announcement, made in the House of Commons, by the Secretary of State on the 20th August 1917, foreshadowing the grant of a measure of responsible Government, and in the present visit of the Secretary of State and his deputation to India.

Meanwhile in September 1916, the nineteen elected non-official members of the Imperial Legislative Council took the opportunity afforded by the Simla season to frame a joint manifesto, which they submitted for the consideration of the Secretary of State, setting forth a list of constitutional changes, which, they considered, were the minimum which should be granted to India in the matter of political reform. The most important measures advocated were : (1) that the number of Indians in executive councils should be increased to

one-half, and that these members should be elected : (2) that the Legislative Council should be very considerably enlarged, and constituted with an elective majority; and that the Imperial Council should control the Budget : (3) that the Secretary of State's Council should be abolished, and his salary placed on the British estimates : (4) that provincial Governments should be made autonomous (in what respects was not said) : (5) that all the major provinces should have Governors and Executive Councils : (6) that a full measure of local self-government should be granted (here again no particulars were suggested) : (7) that commissions in the Indian Army should be given to Indian youths under the same conditions as those which now apply to Europeans. This programme also has become more or less merged in the later developments.

During the last few months of 1916 the Committees of the Indian National Congress and of the All-India Moslem League also were occupied in framing a joint scheme of constitutional reform. This scheme was somewhat on the same lines as that of "the Nineteen", but it aimed at an even more rapid and complete subordination of the executive authority to the elected element in the councils. The adoption of this programme was the most important event of the annual meetings of the Congress and the League, which took place at Lucknow at Christmas 1916.

Political Movements.—23. The Home Rule movement initiated by Mrs. Besant first came into prominent notice towards the end of 1915. The Congress and the Moslem League both of which met at Bombay in December of that year, after some debate formally withheld countenance from it, but they passed resolutions recommending a considerable advance in the same direction. Mrs. Besant subsequently continued her propaganda in Madras, while Bal Gangadhar Tilak organized a parallel movement known as the Nationalist Home Rule League in Bombay. Both Mrs Besant and Mr. Tilak delivered violent speeches which brought them into contact with authority. Mrs. Besant was, under the Defence of India Rules, excluded from the Presidency of Bombay, and later from the Central Provinces, in each case by order of the local Government. Mr. Tilak was prosecuted under the Criminal Procedure Code and ordered by the District Magistrate of Poona to execute a bond in twenty thousand rupees, with sureties, to be of good behaviour for one year. The order was, however, cancelled by the High Court of Bombay on the ground that the speeches taken as a whole were not likely to create disaffection against Government. The Home Rule League did not appear to make much progress outside Madras and Bombay until Christmas 1916, when the Congress and the Moslem League met at Lucknow. At these meetings the followers of Mrs. Besant and Mr. Tilak carried the day and the Congress agreed to countenance the propaganda of local Home Rule Leagues and Committees. From that point the influence of the League in various parts of India increased considerably. The aim of the League, it is hardly necessary to state, is the attainment of complete self-government for India in the immediate future.

The Congress seemed to be in a transition stage. Extremist views, represented by Mrs. Besant and Mr. Tilak and their following were predominant generally, but the moderate leaders still retained their strong position in the various Congress Committees. There was a distinct *rapprochement* between the forward wing of the Hindu party which had captured the Congress and the advanced Muhammadans represented by the Moslem League. The latter as already stated made a joint demand with the Congress for constitutional reforms, and has become little more than an adjunct of it. It may be mentioned that the old Punjab provincial branch of the Moslem League under the leadership of Khan Bahadur Mian Muhammad Shafi adopted a more conservative attitude, and disaffiliated itself from the main body.

The political events narrated in this paragraph, affect only a very small, though potentially important, fraction of the population in India. As far as the great masses were concerned, the year was prosperous and uneventful and there was no widespread political movement or agitation. Still less, if we except one province, was there any serious disorder in any part of the country. The course of anarchical crime in Bengal is dealt with under the Bengal chapter of this report. We need only remark here that the question

was the first to occupy the attention of Lord Chelmsford and his Government after he became Viceroy, and that the year saw the beginnings of a resolute and hitherto strikingly successful attempt on the part of the Bengal Government to grapple with and master the danger. The internment of active conspirators has led to protests. But we have satisfied ourselves by careful and regular inquiries, that the prisoners are treated with consideration and indulgence, and that none is detained for longer than is necessary to the public safety.

There was no revolutionary crime to speak of in other provinces.

Conference of Ruling Chiefs.—24. Lord Chelmsford, soon after his arrival in India, was impressed with the need for the establishment of some organic connection between the Government of India and the Ruling Princes and Chiefs, enabling them to have a voice in the settlement of questions concerning them, their States and their people; and with this object in view, he ordered that the question of the establishment of a Council of Princes should be examined in the Political Department of the Government of India. As a preliminary step towards the institution of such a body he decided to hold an informal Conference of Ruling Princes and Chiefs at Delhi in October and November 1916, to discuss certain matters connected with the Native States, to which all Ruling Princes and Chiefs enjoying a permanent or personal salute of 11 guns or over, excluding minors, were invited. Despite the fact that attendance at the Conference was optional, the Chiefs who assembled at Delhi were fully representative of their order and no less than 40 were present.

Social and moral progress.—25. Several important subjects affecting the social and moral welfare of the people are, for reasons already explained, omitted from this brief chapter. Municipal and rural board administration, education, the protection of children and the reform of youthful offenders, the reclamation of criminal tribes, public health, the drink question—all these belong to the sphere of provincial government, and are dealt with, where the year's record contains any noteworthy feature, in the provincial narratives. We need hardly explain that in such matters the function of the Government of India is chiefly to suggest and control policy, and to act as the medium for obtaining the sanction of the Secretary of State to expenditure exceeding certain fixed limits. It may be hoped that in the future an increased devolution of power will consign these branches of purely domestic administration still more fully to local Governments. Two educational events of the year under review were, however, of general importance and may be recorded here. A recurring sum of R30 lakhs a year was made available from Imperial revenues and allotted to local Governments for the training and pay of teachers in primary and secondary schools: and a conference of the directors of public instruction from all India was held at Delhi in January 1917 under the presidency of the Education Member. The Viceroy opened the proceedings and addressed the conference. Several important aspects of educational work were discussed, and the results were both useful and encouraging.

CHAPTER II.—FINANCE.

Faced with a prospective deficit of over two and a half million pounds, we had, at the close of 1915-16, raised our general customs duties and reduced the free list, imposed an export duty on the two important staples of jute and tea, enhanced the salt tax by twenty-five per cent., and introduced a graduated and higher scale of income-tax. We had thus been able finally to budget for an Imperial surplus of a little less than a million pounds at the close of the year with which this report deals. In the event a much larger surplus was secured. An exceptionally bountiful monsoon; a recovery, in spite of scanty freight and war restrictions of the export and import trade; the high prices of commodities liable to *ad valorem* customs duties; a growing demand from England for medicinal opium, and a brisk market for provision opium in Calcutta; and most important of all, a phenomenal increase in railway receipts due to good rains, favourable trade and market conditions, and the absence of the normal competition from the coasting trade—to these causes was due an excess over the anticipated revenue of nearly ten million pounds. Military expenditure, it is true, was about three million pounds larger than was expected, and there was some extra political outlay in Persia; but the final Imperial surplus for the year fell little short of seven and a half million pounds. This improvement in the revenue position, aided in some degree by increased deposits in the Post Office Savings Bank and by lower capital expenditure on railway material, enabled us to discharge seven million pounds of temporary debt, which the Secretary of State had been constrained to raise in the early days of the war, and to repay four million pounds which had been taken at the same period from the Gold Standard Reserve. We thus strengthened our position for undertaking at the close of the year a gift of a hundred million pounds to His Majesty's Government.

2. It was not then by any anxiety lest our revenues should fail us that we were beset during the year 1916-17; the difficulties which assailed us, and they were many, lay in securing a proper distribution of our resources between England and India. These difficulties arose in the following way. Firstly, we were called upon to purchase in India war material and supplies for the Home Government costing over 37 million pounds; and we could not obtain payment in India for these purchases without requiring the export of specie thither, and consequently endangering larger interests by trenching on the Empire's central stock of gold in London. We therefore accepted payment for this recoverable war expenditure in England. The second reason is to be found in the trade conditions of the year. In normal years the primary object of the Secretary of State's sales in London of Council Bills payable in India is to place him in funds to meet his English expenditure; in 1915 the recovery of thirty-seven million pounds from the Home Government, which has just been mentioned, was more than sufficient to meet the thirty-one and a half million pounds which he required, and he was consequently under no obligation to sell any Council Bills for this purpose. But under war conditions the demand for India's exports was insistent and was subjected to but slight check from considerations of price, of freight or of quantity, while the same conditions restricted the volume of her imports, and precluded or impeded the alternative methods by which payment for her exports could be made. There was thus a heavy balance of trade in India's favour, a balance which has been estimated at sixty million sterling, and, after allowing for the various expedients by which the payment of part of this balance could be effected or postponed, a large residue remained to be liquidated if the Indian export trade was not to suffer a serious setback. At the same time a very considerable portion of India's exports were of national importance for the prosecution of the war, and it was necessary to provide for their continuance. For this purpose remittances to the extent of thirty-three million pounds were placed at the disposal of trade by the sale of Council Bills.

3. The result of these operations was the transfer, from India to England, of no less than £70 million, or a sum more than double the remittances

effected through the Government of India in any two consecutive years since 1899 when the gold standard system first became effective. To the extent of about £31½ million the funds so transferred were applied in England to meeting the normal home charges of the Government of India, a certain amount of capital outlay in England, and the discharge of debt of which mention has already been made. In order to provide in India the balance of £38½ million required in connection with these transactions and in no way with our own immediate needs, it was necessary to take special measures.

4. The measures we adopted were of two kinds. The prosperity of India and the buoyancy of her trade—perhaps, too, the shortage and dearness of imported goods on which the cultivator could spend the money received for his produce—caused an absorption of thirty-three and a half crores of rupees, and in the course of the year we provided the equivalent of about twenty million pounds in new currency by the coinage of silver purchased for us in England. The remaining nineteen million pounds we withdrew from the metallic reserve which covers our currency notes in India, increasing by an equivalent amount the English investments on behalf of the reserve. Steps which had been taken in the preceding years to increase the facilities for encashing currency notes and otherwise to popularise their use now bore fruit; and the increase in the fiduciary portion of the Paper Currency Reserve was rendered possible without danger by an increase of no less than fourteen crores in the active currency note circulation.

5. The resources which the Secretary of State thus obtained in excess of his needs for meeting home charges and repaying debt were devoted partly to the purchase of silver for the fresh Indian coinage, and to the extent of nineteen million pounds to investment in Treasury Bills on behalf of the Paper Currency Reserve. Nor was this the only sum which was lent to the Home Government in the course of the year and thus made available for the prosecution of the war. The four million pounds which our favourable revenue position enabled us to repay to the Gold Standard Reserve, and a further sum of four and a third million pounds representing the profits from new coinage, were also invested in Treasury Bills. In effect, therefore, out of about thirty-eight and a half million pounds which were spent on purchases for the Home Government, over twenty-seven million pounds were re-lent to them by investment in their war securities.

6. For our own needs we required to raise a loan of at least £4 million, and in order to leave the Home market free for the Home Government's war securities, the borrowing operations were conducted entirely in India. The borrowing took the form of a 4 per cent. loan, issued at par and repayable at par in 1936 with an option of redemption from October 1931 onwards, and certain rights of converting securities of the existing 3½ per cent. and 3 per cent rupee loans were attached to it. In all £4,450,000 were obtained from the loan. Its flotation afforded a further opportunity of establishing a connection between Government and the small investor, and, in addition to a post office section which had been a feature of the previous year's loan, facilities were introduced for the receipt of applications at district treasuries and for the payment of the initial deposits on account of subscriptions at district sub-treasuries. To meet the convenience of a certain class of investors, it was also decided, in the course of the year, to introduce bearer bonds transferable by delivery as a form in which the Government of India securities could be held, and arrangements were made for the ready interchange of these bonds with any other form of Government security.

7. At the beginning of 1917, as has been explained, we had ceased to be hampered by a load of temporary debt; Savings Bank deposits had recovered from the drain at the outset of the war; our revenues were flourishing and the deficits of the two previous years had been changed into a surplus; and weakness of exchange no longer formed one of our anxieties. We had reached a position in which we could undertake fresh obligations, and we therefore offered to the Home Government a special contribution of a hundred million pounds towards the cost of the war. So much of this sum as could be

raised by a loan in India was to be made over direct to the Home Government, and the balance would be liquidated by taking over a portion of the home war debt.

The Indian War Loan raised in fulfilment of this promise was only open to subscription for seventeen days in 1916-17, and an account of it belongs more properly to the succeeding year. We may, however, mention here the steps which were taken to meet the annual charge of India's total contribution, which was calculated at £6 million a year, allowing for the gradual extinction of the debt by a sinking fund. In the budget for 1917-18 it was calculated that there would be a surplus of about two and three-quarter million pounds, and to meet the loan charges, it was, therefore, necessary to raise more than three million pounds by additional taxation. This was done by the imposition of a super-tax on incomes in excess of fifty thousand rupees which was expected to bring in £1,350,000, by doubling the export tax on jute, by raising the import duty on cotton goods from 3½ per cent. to 7½ per cent., and finally by imposing a surcharge on railway goods traffic. The increase in the cotton goods duty was estimated to provide an additional £1 million, and the enhanced export tax on jute and the surcharge on railway goods traffic £500,000 apiece.

8. The pre-occupations of war finance did not entirely check the improvement of administrative machinery on the financial side. The sanction of the Secretary of State was received to a comprehensive scheme of financial delegation whereby the powers of Provincial Governments were defined and enlarged, and powers of further delegation to their subordinate officers were granted. The methods of distributing famine expenditure between the Imperial and Provincial Governments were also overhauled and simplified. Lastly a Paper Currency Reserve Depreciation Fund was created to meet the depreciation in the value of the 2½ per cent. consolidated stock held in the Paper Currency Reserve, so that it might be possible to replace the entire holdings of this stock by more suitable securities as opportunity offered. The fund consists of allocations from the receipts of interest on Paper Currency investments, and is invested in British Treasury Bills.

CHAPTER III.—LEGISLATION.

1. The following is a list of the Acts passed in the Indian Legislative Council during the official year 1916-17 :—

1916.

No. X. The Enemy Trading Act.
„ XI. The Import and Export of Goods Act.
„ XII. The Indian Lunacy (Amendment) Act.
„ XIII. The Amending Act.
„ XIV. The Indian Bills of Exchange Act.
„ XV. The Hindu Disposition of Property Act.

1917.

No. I. The Inland Steam-vessels Act.
„ II. The Motor Spirit (Duties) Act.
„ III The Indian Defence Force Act.
„ IV. The Indian Army (Suspension of Sentences) Act.
„ V. The Destruction of Records Act.
„ VI. The Indian Tariff (Amendment) Act.
„ VII. The Indian Income-tax (Amendment) Act.
„ VIII. The Super-tax Act.
„ IX. The Indian Bills of Exchange (Amendment) Act.
„ X. The Indian Army (Amendment) Act.
„ XI. The Indian Paper Currency (Temporary Amendment) Act.
„ XII. The King of Oudh's Estate Validation Act.
„ XIII. The Freight (Railway and Inland Steam-vessel) Tax Act.
„ XIV. The Prevention of Cruelty to Animals (Amendment) Act.

Ordinances.

2. The following Ordinances were made and promulgated by the Governor General under section 72 of the Government of India Act, 1915 :—

1916.

No. IV. The Import and Export of Goods Ordinance.
„ V. The Enemy Trading Ordinance.
„ VI. The Indian Paper Currency (Further Amendment) Ordinance.
„ VII. The Second Indian Paper Currency (Further Amendment) Ordinance.
„ VIII. The Indian Legislative Council (Election Inquiries) Ordinance.

1917.

No. I. The Registration Ordinance.

Nos. IV, V and VII of 1916 were replaced respectively by the Import and Export of Goods Act, 1916, the Enemy Trading Act, 1916, and the Indian Paper Currency (Temporary Amendment) Act, 1917. No. VI of 1916 was repealed by No. VII of the same year, and No. VIII of 1916 lapsed after the statutory period of six months. The provisions of No. 1 of 1917 were continued with slight modifications by the Indian Defence Force Act, 1917.

3. The Arakan Hill District Laws Regulation, 1916 (No. 1 of 1916), which received the assent of the Governor General under section 71 of the Government of India Act, 1915, came into force during the period under report.

4. The following Acts of provincial legislatures received the assent of the Governor-General during the period under report :—

No.	Act.
	Madras.
II of 1916	The Madras Irrigation Cess (Amendment) Act.
III of 1916	The Madras Civil Courts (Amendment) Act.
IV of 1916	The Madras District Municipalities (Amendment) Act.
V of 1916	The Madras City Civil Court and Presidency Small Cause Courts (Amendment) Act.
	Bombay.
IV of 1916	The Bombay Medical (Amendment) Act.
V of 1916	The Bombay Landing and Wharfage Fees (Amendment) Act.
VI of 1916	The City of Bombay Municipal (Further Amendment) Act.
I of 1917	The Bombay Tramways (Amendment) Act.
II of 1917	The City of Bombay Police (Amendment) Act.
III of 1917	The Bombay Abkari (Amendment) Act.
	United Provinces.
I of 1916	The United Provinces Prevention of Adulteration (Amendment) Act.
II of 1916	The United Provinces Municipalites Act.
I of 1917	The United Provinces Public Gambling (Amendment) Act.
	Punjab.
II of 1916	The Punjab Medical Registration Act.
	Burma.
I of 1916	The Burma Prohibition of Inoculation and Licensing of Vaccinators (Amendment) Act.
II of 1916	The Burma Ferries (Amendment) Act.
I of 1917	The Burma Water Hyacinth Act.
II of 1917	The Burma Salt Act.
	Central Provinces.
I of 1916	The Central Provinces Medical Registration Act.
II of 1916	The Central Provinces Land Alienation Act.
	Assam.
I of 1916	The Assam Medical Act.
II of 1916	The Assam Local Self-Government (Amendment) Act.

CHAPTER IV.—MADRAS.

Governor.

THE RIGHT HONOURABLE LORD PENTLAND, P.C., G.C.I.E.

Members of Council.

SIR A. G. CARDEW, K.C.S.I.

H. F. W. GILLMAN, C.S.I.

DIWAN BAHADUR P. RAJAGOPALA ACHARIAR, C.I.E.

The War.—1. In spite of the disturbing effects of the war, the year 1916-17 was for the Madras Presidency unmarked by striking events. Since the beginning of the war, the Madras War Fund has raised nearly 55 lakhs of rupees, and amongst its chief activities may be mentioned the equipment and maintenance of two hospital ships, the raising of a corps of gardeners for Mesopotamia, and the despatch of continuous supplies of comforts to the troops serving in the East. Though the influence of the war was, to some extent, felt in every department of life, owing especially to the absence of European officers, the difficulties of transport by sea and rail, and the financial restrictions imposed both by policy and circumstances, nevertheless the people at large seem to have suffered little. The season was generally favourable with ample rains and excellent crops. Litigation shows only a slight decrease and revenues are on the increase. Notwithstanding the material prosperity the political outlook was disturbed by an outburst of nationalist agitation, led by the journal *New India*—an agitation confined for the present to a section of the educated classes and closely linked to the neo-Hinduism of the Theosophical Society. Among the effects of this agitation has been the creation of a strong anti-Brahman opposition. The people at large appear to be apathetic and uninterested.

Native States.—2. With the exception of the little State of Banganapalle, which suffered severely from a sudden flood whereby a large portion of the capital was swept away, and the State of Sandur where the closure of the manganese mines resulted in half the revenue of the State being unrealised, the Native States of the Presidency were generally prosperous. Travancore and Cochin continued to be progressive. In spite of the fact that His Highness the Raja of Puddukottai has found it necessary to spend the greater portion of the year abroad, the administration of that State was on the whole satisfactory.

Court of Wards.—The Court of Wards, at the close of the year, had charge of twenty estates, which the proprietors, owing to their youth or for some other reason, were unable to manage. The present policy of the Government as regards these estates is to expend the balances as far as possible for the permanent advantage of the estate or its tenants and to avoid handing over a large sum in cash or investments to the young zamindar when he comes of age. With this object in view the Court of Wards carried out on the estates under its control works which accounted for 16 per cent. of the total ordinary charges.

Local Self-Government.—3. The immediate object of local self-Government in India has been in the past, and probably will be for some time to come, rather to educate the people politically than to improve the administration. Its success must, therefore, be judged by educational standards, more especially by the degree of interest taken in local politics by the people of the towns and villages. From this point of view it would seem that while there has been progress, the pace has not, so far as the mufassal is concerned, been very rapid. For instance, during the year under review 340 seats in taluk boards were thrown open to election, but there were only 271 contests

and in these the poll attracted only 33·6 per cent. of the registered voters. There were also 17 seats for which no candidates at all were forthcoming, so that the vacancies had to be filled by nomination. Possibly the interest in local bodies would be greater if their finances were more satisfactory ; but, in the present state of affairs, it has been found necessary to restrict Government grants to a minimum, and the local bodies have therefore, for the most part, been compelled to mark time and have been debarred from adopting a very progressive policy. Thus, the outlay of local boards on public works fell during the year by nearly Rs. 20 lakhs and even on education there was only a slight increase of expenditure. Similarly with the municipalities there was a fall of over Rs. 6 lakhs in Provincial grants, balanced, however, by an increase in general income. A considerable amount of work was done on municipal water-supply and drainage schemes, but there are many projects still to be carried out. It is gratifying to note that the past year has witnessed a very marked improvement in the public health of the City of Madras, and that for the first time since 1904 the recorded birth-rate exceeded the death-rate. How far this improvement is the direct result of the efforts of the City Health Department, it is impossible to say, but the fact that the malaria death-rate is less than half that of the previous year is significant in view of the recent efforts to diminish the number of mosquitoes.

Agriculture.—4. The chief industry of South India is, of course, agriculture ; in fact, most of the Presidency's industries are more or less connected with agriculture, so much so that there is some difficulty in delimiting the spheres of the Departments of Agriculture and Industries. The year has been one of continuous, and for the most part successful, effort along old-established lines. The improvement of sugarcane cultivation by the distribution of the best varieties of seed has met with considerable success. Much educational work has been devoted, as in previous years, to the introduction of improved methods of fertilization and transplantation of paddy, on which a great deal of research has been and is being done. Direct help to the ryots has been given by the department in the eradication of pests, notably the palmyra disease in the Gōdāvari district. One of the most interesting features of the year has been the battle waged against the cultivation of the inferior but prolific *pulichai* cotton, by which the better strains of Tinnevelly cotton were in danger of being ousted. The department was able to offer to the ryot a cotton which is not only better in quality but more prolific than *pulichai*, so that with the help of the chief buying firms, who pledged themselves not to purchase the inferior crop, *pulichai* has been greatly reduced. The Government Cinchona Factory has succeeded in maintaining a plentiful supply of quinine both for the use of India and for the consumption of the armies in the East. The increased output combined with a great improvement in extraction resulted in a profit of over five lakhs.

Industries.—5. Government enterprises under the Department of Industries have not been so successful in spite of the natural protection afforded by the conditions incidental to the war. Largely owing to the impossibility of procuring expert supervision and proper plant the experiments in glass-making and in the manufacture of lime sand-bricks have been reluctantly closed down. On the other hand the pencil factory started by the department has succeeded in producing satisfactory pencils on a commercial scale, though not with indigenous materials. The Department of Industries has also given help to private firms, but the efforts to promote the resuscitation of the use of indigenous dyes have been relaxed, since it has been found that synthetic dyes are preferred by the consumer even when their price is apparently prohibitive. The chief extension of manufactures by private firms has been under the heads of rice-milling and cotton-ginning. Army work has kept the leather and tanning trades busy, but the shortage of tanning barks proved a great difficulty and has necessitated the prohibition of the tanning of skins with a view to ensure that the supply of tanned hides shall not suffer. A feature of the year was the recrudescence of ship-building, nine wooden ships averaging 200 tons each having been built on the West Coast. The various industries promoted by the Department of Fisheries continue to prosper. The tinned fish industry has now got beyond the stage of experiment and is working on a fairly

large scale. Chank and *bêche-de-mer* both gave a profit; while the progress of the soap manufactory has been rapid and the various products of the Government factory are now firmly established on the market.

Co-operative Societies.—6. With regard to the co-operative movement in the Presidency, an interesting and satisfactory development towards the ideal of co-operative control is to be recorded. The chief features of the year were the inauguration of a central provincial bank, with its shares held largely by societies, and a wide extension of the system of local administrative unions. The object of the former is to render the movement financially independent, while the administrative unions will, it is hoped, before long relieve the Government of part of the work of superintendence, while at the same time encouraging a spirit of self-help and mutual reliance among the societies. Coincident with and perhaps consequent on these developments there has been during the past year some improvement in the collection of arrears.

Forests.—7. The policy recommended by the Forest Committee and adopted by Government has been put into effect during the past year by the completion of the classification of the forests in the Presidency and the disafforestation of some 44 square miles of the less valuable reserves. Some progress was made in the preparation of working plans, but, owing to the number of forest officers away on military duty, this important branch of work must for some time to come receive less than the attention it deserves. For the present all that can be done is to prepare and keep up to date the working plans of the most important forests. A subject which is being carefully examined by a special officer of experience is the possibility of improving the facilities for the commerical exploitation of the forests. The difficulty of transporting foreign timber by sea and the exhausting effects of the war on the timber resources of the world have made it imperatively necessary to search the forests of India and extract from them such woods as are necessary for trade. With this object a careful examination has been made of all the chief indigenous timbers with special reference to the commercial point of view. The number of forest panchayats has increased, and their working is reported to be on the whole satisfactory. Efforts have been made to extend the successful 'kancha system', whereby the grazing rights of the village forests are sold subject to certain restrictions to a leading ryot, who sublets the grazing to villagers and is responsible for the protection of the forest and its preservation during the close season. There has been during the past year a considerable increase in the area over which cultural operations were carried on, but regular planting chiefly with teak was as usual confined within narrow limits. With a view to make possible the exploitation of the more remote forests, there was an increase of expenditure on communications, and the Mount Stuart tramway, which worked during the year at a considerable profit, was extended for 1¼ miles. In all, more than 400 miles of forest roads were constructed during the year. It is satisfactory to note that, owing to the restriction of expenditure and the good prices realized by forest produce, the department realized on the year's working the record surplus of nearly Rs. 20 lakhs.

Sea-borne trade.—8. As was to be expected, the sea-borne trade of the Madras Presidency has been determined very largely by war conditions. It is nevertheless at first sight remarkable that the restrictions due to the war have not prevented an increase of 12 per cent. in the total value of maritime trade as compared with the previous year's figures. This increase is, however, more apparent than real, since it is an increase in value and not in volume. Similarly, it is at first sight surprising to find a large increase in the number of ships engaged in the foreign trade of the Presidency, but the improvement in this respect also is illusory, since the gross tonnage of the vessels is much less than that available in 1915-16, the difference being due to the large number of small native craft plying in the place of the steamers which have been requisitioned by the Government. It is nevertheless true that the import trade of the Presidency during the past year was, if not normal, at any rate very much better than might have been expected. So much cannot be said for the export trade, which was handicapped severely by the serious shortage and prohibitive prices of freight to the Mediterranean ports, which in normal

times receive a very considerable portion of the agricultural produce of the Presidency. The war has, however, affected the direction of trade much more than its volume. Prior to the outbreak of hostilities 28 per cent. of the foreign trade of the Presidency was with the Continent of Europe. This percentage fell in 1914-15 to 12 per cent. and in 1916-17 to 10 per cent. The bulk of this decline is due to the stoppage of trade with Germany, Belgium and Austria-Hungary, but there has been a considerable falling-of in the export trade with France, more especially underground-nuts and coffee. On the other hand, there has been a great increase in exports to the British Isles, due especially to large shipments of tanned hides on behalf of Government. Another noteworthy change is the remarkable expansion in the trade with the United States which was almost double the pre-war total and formed nearly 8 per cent. of the aggregate trade of the Presidency. This increase was mainly due to extensive imports of motor-vehicles, railway plant, and mineral oils and to much larger exports of tanned skins. An equally remarkable, but not unexpected, expansion has to be recorded in the trade with Japan which absorbed very large quantities of raw cotton and tanned skins. Imports of cotton goods which form a third of the total imports into the Presidency and come largely from the United Kingdom increased in value by 17 per cent. The chief feature of this increase was the speculative buying of coloured goods in anticipation of a scarcity of dyes. The most remarkable feature of the export trade was the great increase in the volume and value of trade in skins and hides, exported largely under Government control and for military purposes. Forty-five per cent. of the maritime trade of the Presidency passed through the port of Madras which has recently increased its accommodation for large ships and greatly improved the facilities for handling goods.

Public Works and Railways.—9. The Public Works Department has felt the effects of the war to a greater degree than almost any other department of Government. No less than 39 of its officers and upper subordinates were absent on military service, but the shortage of the staff was not of such serious moment as it would have been, were it not for the restrictions of expenditure on new works, necessitated by financial conditions. On the other hand, a very considerable amount of work has been done departmentally for the Army. Though the manufacture of high explosive shells has been discontinued, the departmental workshops are engaged in turning out many of the minor munitions of war such as are produced in times of peace by the various arsenals. The difficulty of getting materials and machinery from Europe has been an obstacle in the way of completing those other works which financial conditions have allowed to continue. This was especially the case with railways. Thus, the two district board railways which were completed during the year could not be opened owing to the lack of rolling stock. War conditions are responsible for the suspension of work on the railway from Tinnevelly to Tiruchendūr and also for the stoppage of survey work in connexion with several other projected railways. The shortage of rolling stock on the railways has caused considerable attention to be given to the chief canals; but the difficulty and expense of improving waterways, which, since the spread of railways, have been largely neglected, make it out of the question to deepen considerable lengths of these canals unless there is a prospect of their being permanently popular. Such expenditure as was incurred on new buildings was almost entirely involved in the completion of works begun before the war. The most important work under construction was the new Engineering College at Guindy. Nearly three lakhs were spent during the year on the college building, which is to cost Rs. 15 lakhs. The Agricultural College, Coimbatore, the estimate for which exceeded Rs. 10 lakhs, was nearing completion at the end of the year. Under irrigation works there was a decline of nearly 10 lakhs in the expenditure and a similar fall in the revenue realized. Of the four major protective works three were in course of construction, while one—the Rushikulya system in Ganjám—is already in operation. When deductions have been made on account of interest on capital outlay, the working of the Rushikulya system during the year shows a deficit of over half a lakh. The chief productive work under construction is the Toludur project, but some expenditure was incurred on improvements to the great delta systems. The three and a half

million acres irrigated by major productive works yielded a profit of 6·54 per cent. on the capital outlay in spite of a considerable loss on the Kurnool-Cuddapah canal.

Finance.—10. Notwithstanding the fact that the gross revenue of the Presidency, both Imperial and Provincial, increased by R131 lakhs, the financial policy of the Government as determined by war conditions continued to be one of extreme conservatism, expenditure being confined to the most necessary objects. Deducting expenditure charged to revenue, the surplus of the year excluding some of the Imperial heads amounted to Rs. 1,233½ lakhs, exceeding that of the previous year by Rs. 151¾ lakhs. The net receipts from State railways increased by Rs. 30½ lakhs owing chiefly to the raising of fares and freights. Higher rates of duty and increased sales account for an improvement of nearly Rs. 13 lakhs in the salt revenue. There was an increase of Rs. 281 lakhs in the revenue from customs partly owing to the revised tariff and partly owing to the prevailing high prices, which are reflected in the enhanced receipts from *ad valorem* duties. The increase of Rs. 20¾ lakhs in the excise revenue is the result of a general increase in consumption which is ascribed to the good season and the consequent prosperity of the people. On the other hand, the rise of Rs. 19½ lakhs in the income-tax receipts is due to the introduction of enhanced rates of taxation. Other items of revenue show less variation from the figures of the previous year. Land Revenue (both Imperial and Provincial) realized Rs. 700 lakhs, a satisfactory figure approximating closely to that of the previous year. In contrast with the general rise of income there was in the majority of cases a fall of expenditure. There was, however, under Provincial expenditure an increase of Rs. 6 lakhs under Education, while the cost of the Police Department rose by Rs. 4¾ lakhs owing to the revision of the pay of the constabulary rendered necessary by shortage in recruitment. The chief decrease in Provincial expenditure was under Sanitation, under which head there was a fall of Rs. 16½ lakhs owing to the policy of curtailing expenditure on all works which are not immediately necessary. There was a deficit of Rs. 9½ lakhs under Local funds, which, however, compares favourably with the deficit of Rs. 16¾ lakhs in the previous year.

Education.—11. The progress of education in the Madras Presidency has, of necessity, been hampered by the financial difficulties of the times, but its claims have been less stringently regarded by the authorities than have those of most other departments. It must be remembered that the shortage of funds affects not only the Government, but also the various missionary bodies which play such a large part in Indian education. The stoppage of expenditure on schools and colleges would, it is obvious, do much more lasting harm to the cause of progress than the withdrawal of funds from other departments whose schemes are more capable of postponement. It has, therefore, been the endeavour of Government to find the money for some degree of expansion of educational facilities, and thus to prevent the period of the war from proving a period of retrogression or stagnation, even though the rate of progress be slower than would otherwise be desirable. The result of this policy is illustrated by the fact that during the past official year the number of public schools and colleges rose by 2·6 per cent., while the increase of strength was even greater. There was also a small but welcome increase in the proportion of children attending school. That this proportion is still regrettably small can be seen from the fact that in 1916-17 only 6·5 per cent. of the male population and 1·55 per cent. of the female population were in receipt of instruction. When it is remembered that very many of those who do for a time attend school relapse as they grow older into complete illiteracy, the urgency of the need for educational expansion will be apparent. During the year under review, in consequence of the ease with which many who were not properly equipped for more advanced study managed to secure a secondary school-leaving certificate rendering them technically eligible for collegiate education, it was found necessary to demand a higher qualifying standard in certain subjects as a preliminary to entry on a university course. On the other hand, the Intermediate examination which is the half-way house to graduation was made more easy by a new rule, which allowed the separate parts of the examination to be taken up one by one. In consequence of the formal change there was a noticeable decrease in the number of students entering the colleges. The

result of the latter change has not yet become apparent, but it ought to cause an increase in the proportion of students who succeed in graduating. The problem of female education is one of great difficulty owing to the customary seclusion of the older girls of most of the higher castes. The consequent shortage of women fitted to teach in schools re-acts on the progress of elementary education for girls, since caste people are reluctant to send their daughters to schools where most of the teachers are men. It is, therefore, gratifying to note that there has been of recent years a very rapid improvement in the condition of higher education for girls. An important step forward was taken during the year under review when the Government Women's College, Madras, was raised to the first grade.

Crime and Police.—12. There was in 1916-17 a decrease of nearly 3 per cent. in the number of grave crimes investigated by the police. Whether this decrease is, as claimed by the police, due to the successful supervision of known criminals and the segregation of professional thieves in criminal settlements, or whether it is the natural result of the prosperity of the masses owing to a succession of good years, it is impossible definitely to pronounce. Much enthusiasm has been concentrated both by Government officers and by philanthropists of the Salvation Army and other bodies on the work of the criminal settlements, but it is too early to judge how far these settlements have been really successful. Most of them have had great difficulties to contend with, chiefly in finding suitable labour for large numbers of untrained and often unwilling workmen. In the jails all convicts are classed as casual or habitual offenders, and the two classes are as far as possible segregated. Juvenile convicts are, in the great majority of cases, sent to the Reformatory, while the adolescents are treated under the Borstal system at Tanjore. Efforts to prevent crime by increasing the efficiency of the police were continued. A revision of the pay of the constabulary does not appear to have had much effect so far on recruitment, but there have been fewer desertions and resignations. The system of selecting sub-inspectors from candidates nominated by local committees in the districts was brought into force, but the results so far are inconclusive. The help of local gentlemen has also been enlisted to a much larger extent than heretofore in the administration of justice. More than half the cases instituted in the Presidency town were disposed of by honorary magistrates, and there was a large increase in the number of bench courts in the mufassal. The efforts of the Government to increase the usefulness of the village courts have not met with much success; whether it be that the villager doubts the impartiality of the headman, or whether he prefers the glamour and publicity of the regular courts cannot be said, but the fact remains. That the lack of cases in village courts is not due to any lack of complainants can be seen from the statistics, which show that there was a slight increase in the number of criminal cases instituted in the regular criminal courts. The number of civil suits, though slightly less than the record figure of the previous year, is undoubtedly large, representing as it does a ratio of one suit for every 78 persons in the whole Presidency and one for every 29 persons in the Presidency town. That the plaintiffs were successful in 75 per cent. of the contested suits would seem, however, to show that litigation in the large majority of cases is not purely speculative.

Public Health and Medicine.—13. In the days before the war it was a common charge against the organization of medical relief in India that the staff was quite insufficient to supply the needs of both the military and civil branches in the contingency of a great war. That there was some measure of reason for this apprehension can be seen from the fact that the Madras Presidency has had to surrender to the military department all its Indian Medical Service officers except sixteen, in addition to 27 assistant surgeons and 76 sub-assistant surgeons. During the past year, in spite of shortage of staff and notwithstanding financial difficulties, it was possible to increase both the number of institutions and the number of patients relieved, while at the same time there was a pronounced fall in the hospital death-rate. This state of affairs could not have been maintained had it not been for the efficiency of the remaining officers of the superior service, who have each been doing several men's duties, and of the assistant surgeons who have been called on to take

charge of important hospitals. During the year 1916-17 more than seven million patients were treated in the public hospitals and dispensaries maintained or aided by the State and by local bodies. There was a very large and satisfactory increase in the number of medical students, due partly to the opening of a new medical school at Calicut. The Pasteur Institute treated a record number of patients, and efforts are being made to collect reliable statistics as to the efficacy of the treatment. In Madras City, a careful malaria survey has been made and preventive measures have been taken on a fairly large scale against this disease. By means of itinerating dispensaries something is also being attempted in the mufassal, but the huge area over which malaria prevails precludes any possibility of concentrations of effort such as have been successful in the cities of Europe and America. Great differences of opinion exist as to the efficacy of the measures taken in the Madras Presidency for the prevention of the spread of plague, but the fact remains that the larger part of the Presidency has enjoyed a comparative immunity from the disease, which may—or may not—be ascribed to the working of the plague passport and notification systems. As regards cholera, there has for some time been a tendency for epidemics to be less serious and more local. It is hoped that the improvement of water-supply and the spread of education in hygiene will, in a very few years, reduce the mortality from cholera to much smaller dimensions.

CHAPTER V.—BOMBAY.

Governor.

THE RIGHT HONOURABLE LORD WILLINGDON, G.C.I.E., G.C.B.E.

Members of Council.

SIR M. B. CHAUBAL, K.C.I.E., C.S.I.

G. CARMICHAEL, C.S.I.

G. S. CURTIS, C.S.I.

The War.—1. The war naturally and inevitably dominated the year, and its influence and effects were felt in every branch of the administration. Progress was hampered, and the introduction of reforms delayed by the economy and curtailment of expenditure which it necessitated. In many departments the absence on war work or service of a large number of officers belonging to their higher ranks not only prevented expansion, but made the discharge of ordinary work and the maintenance of existing standards only possible by the strenuous and loyal efforts of the depleted staff. The administrative history of the year has therefore, apart from war work, few events of importance to record. The loyalty of the Native States of the Presidency was again displayed in connection with the war. The Imperial Service Lancers of the States of Junagadh, Nawanagar and Bhavnagar continued to be at the disposal of Government, and His Highness the Rao of Kutch again paid the cost of an Indian Infantry regiment at the front. Large contributions were made by the Chiefs and their States to the Indian war loan, and the several war funds were also the recipients of generous assistance from the Chiefs in money and in kind.

General Conditions.—2. The year was one of substantial prosperity for most classes of the population. In the Presidency proper the season was favourable, and rainfall above the normal, a deficiency in the month of July being more than counterbalanced by an excess in the succeeding months. A fall of almost unprecedented violence in the end of October and beginning of November did widespread damage in the Karnatak districts to dwellings, standing crops and grain in pits, and caused some loss of life. Relief measures were promptly undertaken through both official and non-official agency. The area of serious damage was fortunately confined to two districts, and, apart from their misfortunes, the year had no untoward events to record and was a prosperous one from the agricultural point of view. Favourable inundation and seasonable rains resulted in a large increase in the area of cultivation in Sind, but elsewhere the rise was inconsiderable. Prices were high, though less so than in the previous year in the case of food-grains generally. The area under food crops decreased in the Presidency proper, mainly on account of the large area transferred to cotton owing to the high prices obtaining for that crop. The additional area sown with it amounted to no less than one million acres. Fluctuations in its price were considerable, but at times extraordinaily high prices were secured and the cotton-growing districts benefitted largely. In Sind the increase in cultivation was shared by both food and non-food crops, and here again there was a marked increase in the area under cotton.

Prices of other commodities, and especially of imported articles, continued to rise, and the increase in the expense of living was severely felt by all classes whose incomes are fixed. The supply of both skilled and unskilled labour in the Presidency proper was unequal to the demand and wages remained high. The scarcity of labour and the high remuneration it commanded were everywhere amongst the chief causes of difficulty in securing recruits for the army and for labour corps.

Agriculture.—3. The Agricultural Department had another successful year, and besides numerous other activities initiated a promising and important scheme for the improvement of cattle. It continued its experimental

work in connection with the improvement of seeds. That on cotton seeds is perhaps the most important in this branch of the activities of the department. In Surat the selected strains yielded a higher return than the ordinary variety, but in Sind results as regards American cotton have been disappointing and its cultivation there, in view of the decision of a cotton-buying syndicate to discontinue its buying operations owing to the poor outturn and the small quantity of cotton received, has for the moment ceased to have a commercial aspect. While the physical conditions of Sind seem to be suitable if and where water can be supplied throughout the year, the economic conditions are difficult. In the Southern Maratha country attention is being given to selected strains of Kumpta and Upland American cottons, which show considerable advantages both in quantity and quality over the local varieties. The value to the cultivator of superior strains is largely bound up with the question of marketing, but extensive fraudulent mixing of long and short staples renders the market insensitive to any alleged superiority in staple.

The advantages of the improved agricultural implements supplied or advocated by the department are becoming more appreciated and considerable sales of these took place. Iron ploughs are now freely used in most localities. A promising scheme for the improvement of cattle has been initiated, while the important question of manures was under investigation with valuable results.

The conditions of the year were unfavourable to the development of agricultural engineering, but some progress took place. The demand for power plants still continues and many purchasers make good use of them. Well-boring operations again showed a large proportion of successes. Formal shows and village demonstrations, ploughing and standing crop competitions, the publication of bulletins and leaflets and informal propaganda were other branches of the department's activities. A few new agricultural associations came into existence during the year. Many of these associations, it is reported, did useful work, but in the absence of funds it was of a spasmodic nature and was carried on by individuals rather than by associations in their corporate character.

Co-operative Societies.—4. The co-operative movement made remarkable progress, and, while the year was a record one in the matter of statistical results it was not less marked by the growth of the spirit of mutual help. The number of societies, the number of members and the amount of working capital all show an advance of twenty-five per cent. on the figures of the previous year.

The number of members in all classes of societies in the Presidency of Bombay now amounts to 128,000, commanding a working capital of ₹122 lakhs or £813,000. This capital is barely sufficient to finance the current needs of agriculture and to purchase necessary stock, and, while this primary duty of the societies is still not completely fulfilled, they have been unable to deal with questions connected with debt redemption and land improvement. Agricultural societies made a distinct advance during the year and local deposits by members and non-members were almost double those of the previous year.

The salient fact of the year for this movement, as for so many other departments of public life, has been the war. Rates of interest have been creeping up everywhere, and the Indian war loan caused a sharp rise in the price of money. This has not, however, led to any reduction in the rate at which the movement is spreading nor to any slackening in the steady increase of the funds obtained from the public. The restriction of credit by the Provincial Bank, due to a tight money market and an enhanced lending rate, made it possible for the first time to organise local central banks with a reasonable prospect of success. Three new banks were formed during the year and made a promising beginning. These local banks should be of much value in tapping the local money markets for the benefit and needs of co-operative societies.

A departure of much importance and promise was the formation of guaranteeing unions which will relieve the department and the central banks of detailed duties, which with the growth of the movement were becoming too heavy. Such unions will furnish a convenient unit of administration and, it is hoped, provide efficient and responsible local supervision.

The movement has not been confined to the credit aspect of the rural

problem only. Co-operative dairies, societies for the purchase of implements, cake manure and so forth, for the sale of cotton and jaggery, and for cattle-breeding and cattle insurance have made a very promising beginning. Forty-two societies have been formed for the purchase of agricultural necessaries and the sale of agricultural produce. Such societies need more attention and business ability than ordinary credit societies, and it is too soon yet to say whether this side of the work is likely to prove permanently successful. But in the opinion of the Governor in Council all the omens are favourable.

The urban problem has not been neglected. Non-agricultural societies were more affected by the war than those dealing with agricultural needs, but continued in general to make satisfactory progress. Weaving societies were much hampered by the adverse conditions for the hand loom industry arising out of the war and though useful work was done, the further organization of such societies has ceased till conditions improve. Several large People's Banks are doing well. Among artizans and the mill population generally the need for co-operative societies is clear and urgent, but the number so formed barely yet exceeds one hundred. The migratory habits of these classes, their lack of real property, and the scarcity of public-spirited workers willing to give time and trouble to their needs hampers progress. However, with the help of institutions like the Servants of India Society, the problem is being gradually tackled on a more adequate scale. Co-operative stores and housing societies are beginning to make their appearance, and these cannot fail to have a beneficial effect. The attitude of the public towards the movement is consistently friendly and sympathetic, and the number of volunteers for honorary work in the districts on behalf of co-operation is growing rapidly. In Sind the number of societies doubled itself, and there also the year has been a remarkable one in point of the growth of the co-operative movement.

Internal Trade.—5. The internal trade of the Presidency has fully recovered from the depression which accompanied the early stages of the war and the uncertainty and unrest which prevailed in the sphere of trade and commerce at that period have now practically disappeared. The improvement in conditions was reflected in a small increase in the number of documents registered and a rise in stamp revenue and, although the war continues to affect the flotation of new companies, and no large increase in these is likely until the return of normal conditions, there was a distinct improvement in this respect. The number of companies newly registered rose, while liquidations were considerably fewer, and the paid up capital of share capital companies increased.

Industries.—6. The cotton industry is by far the most important in the Presidency, and in Bombay alone supports over eighty mills. In spite of the high prices of mill stores, accessories and raw material the year was one of exceptional prosperity for the cotton mills, and lessened competition and new markets enabled handsome profits to be earned. Ginning and pressing factories also had a good year, and the number of those at work showed a large increase. The lack of dyes and chemicals continued to be severely felt, and the high prices of the former and of yarn affected the handloom industry very adversely and inflicted great hardship on handloom weavers. The match, copper and brass work, silver and gold thread and other minor industries also suffered severely from the war, but paper, flour and oil mills had a prosperous year.

The restriction of imports which arose from the necessities and vicissitudes of the war has given a great stimulus to the movement for the expansion of Indian industries, and in the year under review the subject received much attention both from this Government and the commercial and industrial leaders of the Presidency. The duty on Indian denatured spirit was abolished with the object of encouraging the use of such spirit for commercial purposes. Similarly arrangements were made for the levy of a lower duty on Indian-made rectified spirits used in industries seeking to replace imported chemicals by local manufactures. Encouragement was given to a private company which undertook the removal of salt bitterns at Kharaghoda salt works. This company manufactures a large quantity of magnesium chloride and is proceeding to make Epsom salts and refined salt for industrial purposes.

Shortly before the beginning of the year under review, in accordance with the wishes of prominent business men in Bombay, Government appointed a

strong committee, representing the chief interests in the commercial and industrial circles of Bombay, with an official secretary, to advise Government on the question of the development of indigenous industries. This committee made careful inquiries into the condition and possibilities of several of the secondary industries of the Presidency, such as the oil-seed, leather, match and glass industries, and submitted reports to Government on these and other industries. It advised certain courses of action, and issued, under the authority of Government, press notes with the object of attracting public interest to some industries that seemed to present prospects of success. Government have unfortunately been unable to take active steps to carry out the suggestions of the committee, partly owing to the need of economy and the shortage of personnel on account of the war, but chiefly on account of the presence in India of the Indian Industrial Commission, whose proposals and recommendations it was not thought advisable to anticipate, particularly in the direction of creating a new and costly provincial department of industries. Since the close of the year, however, an officer has been placed on special duty as Director of Industries, to carry on and supplement the activities of the committee and to prepare the ground for the creation of the department of industries.

External Trade.—7. The gaps in the Presidency's markets due to the war have in considerable measure been filled, in particular by a larger trade with Japan and the United States and by a material increase in exports to the United Kingdom. Trade with Mesopotamia and East Africa and the Red Sea littoral has also expanded, especially in the case of cotton piece-goods of Indian manufacture.

Exports expanded largely both in volume and value, while imports rose slightly in volume and considerably in value. The value of the total foreign trade in private merchandise was in excess of the figures of any previous year except those of 1913-14, while that of exports of Indian produce and manufactures exceeded even the figures for that year by almost a crore and a half of rupees or £1,000,000. The most noteworthy increase is in the exports of cotton piece-goods of Indian manufacture, which rose in quantity by 130 million yards and in value by almost Rs. 2½ crores. Aden, Zanzibar, Turkey in Asia, Persia and East Africa all show striking increases in their purchases. The very favourable season contributed largely to this result, which was arrived at in spite of dear and scanty freight, the loss of markets in hostile countries, restrictions dictated by the necessities of the war, and exchange difficulties. High prices, and abundance of produce and the encouragement of the export of articles of national importance were the main factors operating in the opposite direction. The share of the British Empire in the total trade showed a slight falling off, while the shares of Continental Europe and non-British Asia somewhat improved. In land trade a marked expansion took place in imports of Indian coal.

The total value of the sea-borne trade of the province of Sind also shows a substantial rise. Exports of wheat alone rose in value by Rs. 142 lakhs, or nearly a million pounds, owing to a shortage in other countries and a surplus in India from the the previous year. Exports of raw hides and skins and of seeds were also large. The share of the United Kingdom in the total trade receded while that of allied countries in Europe expanded.

Port Trusts.—8. The year was one of much activity for the Port Trusts of Bombay, Karachi and Aden. All ordinary work was naturally subordinated to military requirements but mercantile traffic reached an unexpectedly high level. In Bombay receipts rose to a record figure due to the activity of the export trade and the large amount of Government traffic. The number of vessels entering the docks was also the highest ever recorded and the tonnage figures of ships which were dry-docked was almost double that of any year before the outbreak of the war. Four and a half million tons of cargo were handled. It is impossible to speak too highly of the importance and value of the war work done by the Trust. The handling of Government stores and munitions and of coal for Government vessels, troops and personnel and of sick and wounded were some of the directions in which assistance was rendered. It was most fortunate, in the interests of India and the Empire, that important extension works were ready to be brought into service a few months after the outbreak of the war, and it was due to them that the vast amount of material

and personnel moved in connection with the war was successfully dealt with. Prior to the war no coal came to Bombay by rail, but in 1915 the whole coal trade not only of Bombay City but of all the shipping of the port took that route. Had it not been for the Port Trust reclamation and its railway, this traffic could not possibly have been handled. Valuable war work was also done by the Karachi Port Trust, and its new offices continued to be occupied as a war hospital.

Politics.—9. In the year the political truce which had been loyally observed in the early stages of the war was gradually being replaced by demands for constitutional changes and agitation in other directions. The movement and its causes were imperial rather than provincial and need not be analysed here. There were, however, some aspects of its development in this Presidency which are worthy of attention.

During Mr. Tilak's imprisonment political agitation in the Presidency of Bombay had taken a decided turn for the better. In June 1914 he was released and early in 1916 took up the Home Rule movement and started on a lecturing tour in the Maratha country. One of the theories developed by Mr. Tilak and other agitators of this movement in their lectures and newspapers was that any attack on the "bureaucracy" was permissible so long as it was accompanied by an expression of loyalty to the Crown and the British Government, and the speeches made by Mr. Tilak in the course of his tour were full of invective against Government officials. On 12th August 1916 Mr. Tilak was bound over by the District Magistrate of Poona to be of good behaviour for a year. The High Court of Bombay, however, set aside the Magistrate's order on the ground that, though Mr. Tilak's speeches were bad in places they were not to be wholly condemned on that account. This was naturally hailed as a victory by the Home Rule party and political agitation of this type received the greatest encouragement.

The question of Hindu-Mahommedan relations is one of imperial interest, but it has a special local interest for the Presidency of Bombay, as it was when the Indian National Congress and the Moslem League met in Bombay in December 1915 that the Hindu-Moslem *entente* first began to take shape; it was greatly strengthened by the Bombay Provincial Conference held at Ahmedabad in October 1916, where Mr. Mahomed Ali Jinnah, at that time president-elect of the ensuing meeting of the Moslem League, presided over a conference of the Hindu Congress party which had been hitherto almost exclusively Hindu. The Ahmedabad Conference was also of considerable importance as being the first regular Congress gathering in which the extremist Hindu politicians had taken part since they seceded from the Congress when it broke up in disorder at Surat in December 1907. The year, in short, witnessed a coalition of the leading political parties which aim at a greater measure of self-government, and a very considerable accession of strength to the more advanced sections of these political bodies, both Hindu and Mahommedan.

Local Self-Government.—10. There were few notable changes in the working of the Bombay Municipality during the year, as was inevitable with capital expenditure severely curtailed on account of war conditions. The work of district municipalities, which number 155, was also restricted by financial considerations, which involved the curtailment of Government grants and consequently of new works. The right of electing their presidents was granted to certain towns in Sind and the status of city municipality conferred on various non-city municipalities.

The whole question of the constitution and administration of ocal boards had been the subject of inquiry and report by a committee appointed in the previous year and important changes were effected in connection with its recommendations. The general policy of Government has been to stimulate and strengthen the bodies entrusted with local self-government and to entrust their administration in a larger degree to non-official agency. In pursuance of this policy the proportion of elective members of district local boards was raised from one-half to two-thirds in the case of sixteen districts, and, on the expiry of the term of office of the remaining boards in the presidency proper, a similar measure will come into effect in their case.

Non-officials were appointed as presidents of six district boards and in both district and taluka boards substantial progress was made in replacing officials by non-officials as vice-presidents. An extension of the elected element in the taluka boards also was under consideration and has since been sanctioned. Towards the close of the year a special officer was appointed to investigate the possibilities of further advance in this sphere. The constitutional charges were the most important features of the local board administration during the year, while in other respects the work of the boards was carried out on the same lines as in previous years.

Public Works.—11. In the Public Works Department a large number of officers were absent on war work. No new works of any magnitude were undertaken. A forest engineer was engaged on the development and opening up of large forest areas in the Kanara jungles. Owing to the natural difficulties of the country in which the work lies, absence of labour, shortage of food and lack of shelter, progress was slow but some very useful pioneer work was done. A survey of a railway line opening up a considerable area has been made and the execution of the work taken in hand. Important improvements and additions to the water-supplies of Ahmedabad, Poona and Hyderabad were carried out. In spite of the financial stringency the construction of the extensive system of protective canals, which is being provided for the Deccan, has not been interrupted. Some of these works have practically been completed, others are approaching completion and those in connection with the Nira Right Bank canal, the most important work of its class in India, are in full swing. These canals are not intended to give a full return in the ordinary commercial sense but are and will be of the utmost value in securing large areas of cultivation against the vicissitudes of the seasons and in preventing the famines which have been of constant recurrence in the tracts they irrigate.

Forests.—12. There was a substantial increase in the revenue from forests and in the surplus of revenue over expenditure. As mentioned above, steps are being taken to improve the communications in the forests of the southern circle without which their resources cannot be utilised. A criminal tribe settlement was started in the forests of the southern circle to meet in some small degree the lack of forest labour which is, after the paucity of communications, the most serious difficulty, and three new saw mills were established. From the Sind forests very large quantities of fuel were supplied for the army in Mesopotamia, but the consequent depletion of stocks, and the hardships to the population of Sind, which is also dependent on these forests for their fuel supply, created a difficult situation as regards prices and supply.

Excise.—13. The policy and administration of the Excise Department were the object of careful attention and consideration during the year. The intoxicant most used in this presidency is country spirit. The policy of Government as regards it has been to restrict consumption by increased taxation and a reduction in the number of shops and at the same time to render the liquor consumed less harmful by lowering its strength and substituting the weak variety for the stronger liquor. The consumption of toddy, which, when fresh, is a wholesome and harmless drink, is also encouraged. The taxation on country liquor and, as a consequence, its retail price have been enhanced in recent years as rapidly as was possible without unduly stimulating illicit distillation. In the year 1916-17 this policy was steadily pursued. The number of shops for the sale of liquor was reduced; that of shops licensed for the exclusive sale of weak spirits was increased and the duty on strong spirits was raised.

In spite of a decrease in the number of liquor shops, the inducement given to the consumption of weak and less highly taxed liquor and restrictions on the use of intoxicating drugs, the excise revenue, which had been practically stationary in the preceding three years, showed the very considerable rise of nearly ₹32 lakhs due mostly to an increased consumption of country spirit. The favourable agricultural season and the high wages prevailing for unskilled labour were the main reasons for the increased receipts. The increase in sales and revenue has been met by a large increase in still-head duty which will take effect in the current year.

Public health and medicine.—14. The year was far from being as healthy as its predecessor and the number of in-door and out-door patients treated in hospitals and dispensaries showed a further increase. Among in-door patients this occurred chiefly among cholera, small-pox and malaria cases, while malaria was the chief disease amongst out-door patients. Eight sub-assistant surgeons were placed on special duty in the most malarious parts.

The second half of the year was marked by a rise in plague mortality which reached its maximum in December. The Deccan districts, the Southern Mahratta Country and Bombay City were most seriously affected, but deaths were reported from all except three districts. Special inoculators were sent to the badly infected districts and inoculations were performed on a larger scale than in 1915-16. As usual, these resulted in a much lower incidence of attacks of and mortality from the disease amongst inoculated persons and confidence in inoculation is steadily increasing. Work and investigations in connection with rat destruction were continued and hydrocyanic acid gas was tried as a suitable poison for rats and fleas in houses and grain stores. From cholera the heavy mortality of almost twenty thousand deaths was recorded. East Khandesh and other districts, to which the disease spread from it, were the chief sufferers.

In sanitary matters arrangements have been made for the examination of drinking-water, the supplies of various important towns have been improved, and a committee investigated the problem of the sanitation of pilgrim centres which are a fruitful source of epidemic diseases. Small-pox cases were more numerous than in the previous year, but less than the decennial average. Vaccination is voluntary except in the larger towns and is being popularised by the use of glycerinated calf vaccine. District sanitary associations have been formed and have done useful work, while a sanitary demonstration held at Belgaum was largely attended.

A new civil hospital was opened and another completed during the year. Six taluka dispensaries were also opened and many additions and improvements made at civil hospitals. To spread a knowledge of the danger of tuberculosis instruction to school teachers and children was given and lectures and demonstrations were held.

Owing to the war the medical services have been depleted to the utmost extent and the loss of staff and curtailment of expenditure make present progress difficult. No fewer than 43 officers in the medical service out of the sanctioned staff of 58, the entire staff of military assistant surgeons employed on civil duties, almost one-third of the civil assistant surgeons, a large number of civil sub-assistant surgeons and many of the nurses and the trained servants of civil hospitals were surrendered to meet military requirements. In spite of this depletion a large military hospital in Bombay was worked by a civil medical staff and various civil hospitals have undertaken the treatment of military cases.

Education.—15. The institutions which provide higher professional and technical education had a successful year. The constitution and the working of the Law School have been investigated by a committee and the school is now to be reorganised and its staff increased. In spite of very doubtful prospects the number of candidates for the legal profession is increasing and apparently will continue to do so indefinitely. For the more promising and less congested commercial sphere instruction of an advanced type is provided in the Sydenham College of Commerce which, though handicapped by a lack of suitable accommodation, is growing in popularity.

The number of students in the various institutions affording technical education showed a slight fall. Industrial schools in general have not so far achieved any great success. Promising developments are taking place in the School of Art, Bombay, especially in its pottery and architectural departments.

The number of middle and high schools and that of pupils in them increased. The most obvious defect in secondary education is the wholly inadequate provision for the training of secondary teachers.

The number of local fund and municipal board schools, which comprise the greater proportion of primary schools, increased, and that of pupils

showed a small decrease in British districts, as did the total number of primary schools. Much has been done in spite of war conditions during the last few years to provide suitable buildings and equipment, especially in local board schools. Primary education still suffers from the insufficiency of trained teachers and the inadequacy of the pay of untrained and lower grade trained teachers. These questions were under consideration in 1916-17 and considerable sums have now been allotted to improve the conditions of trained and untrained teachers.

Finance.—16. The Provincial budget for the year 1916-17 was characterised by an even more rigorous control over expenditure than in the previous year. All proposals for new expenditure were closely scrutinized and only expenditure of imperative necessity or of an immediately remunerative character was sanctioned. Both Imperial and Provincial revenues rose considerably, the total increase amounting to over three crores of rupees equal to £2,000,000. Increased taxation in the form of enhanced customs duties, income tax, and salt tax accounted for the rise in Imperial revenues, while Provincial revenues profited from an increase in excise receipts and in their share of the income tax. Imperial expenditure showed a slight increase, mostly on recoverable items, while Provincial expenditure was further curtailed.

Crime and Police.—17. The year, though free from any outbreak of serious crime, was a strenuous one for all branches of the police force. In Bombay City there was some increase in cognizable crime, but in the area dealt with by the mofussil police it showed a considerable decrease, which was specially notable in the case of dacoities and robberies. The total recorded under these heads was the lowest for the quinquennium. Another satisfactory feature of the year was the fall in the number of theft cases in the same jurisdiction and the improvement in the percentage of property recovered. While the statistical returns are at least as good as in past years the continued depletion of the ranks of the constabulary and the general unsatisfactory conditions of service have now become a subject of grave concern.

A more extensive and satisfactory use was made of the provisions of law allowing the discharge of youthful offenders with an admonition or their delivery to parents and guardians, a policy which has been steadily impressed on magistrates by Government. Towards the end of the year the sentences of 1,056 prisoners were remitted conditionally on their undertaking to serve in a labour corps in Mesopotamia. A Prisoners' Aid Society commenced operations in Bombay during the year but has been limited in its activities by want of funds. Another similar society was at work in Bijapur.

CHAPTER VI.—BENGAL.

Governor.

THE RIGHT HONOURABLE LORD CARMICHAEL, G.C.I.E., K.C.M.G.*

Members of Council.

P. C. LYON, C.S.I.

NAWAB SIR SYED SHAMS-UL-HUDA, K.C.I.E.

N. D. BEATSON-BELL, C.S.I., C.I.E.

Introductory : the war, the press and political tendencies in Bengal.—1. The province was on the whole affected in a singularly slight degree by the great struggle in Europe. The enhanced prices of many imports have caused some inconvenience to the middle classes, but the great bulk of the population—simple agriculturists whose wants are few—has pursued the even tenour of its way, absorbed in the economy of its daily life and aloof and remote from the maëlstrom of war. In certain areas flood and drought brought famine or distress, while expenditure on original works or on the improvement of administration has been curtailed, but on the whole the harvests were bountiful, prices good and the *raiyat* prosperous. In its political life the province has in some measure responded to the spirit of the times ; the Allies as the champions of nationalism have furnished a new rallying cry to the extremists, who claim the speedy realization of an "India for the Indians" without perhaps appreciating its practical difficulties.

Apart from some Urdu publications, which have shown sympathy with Turkey, the Bengali papers have generally adopted a loyal attitude in respect of the war; but questions of Indian politics continue to monopolize almost entirely the interest of their readers, and their columns are devoted day after day to a somewhat clamorous political propaganda. Hostile criticism of the actions of Government is, however, no new thing in Bengal, and this lack of perspective which the Indian press displays is hardly surprising in a province in which the realities of war are so little manifest.

It is not easy to determine how far the Bengali press is a popular one and to what extent the extravagant demands it reiterates reflect the sentiments of the educated public as a whole. There can be little doubt that the constant attacks upon Government must colour and bias the views and feelings of immature and impressionable students, and there are signs of the cordial good will and steady loyalty of sober moderate Indians being undermined and weakened by the incessant flow of criticism.

Among the political tendencies of the year, there was noticeable an attempt on the part of the Congress leaders to win the adherence of the more prominent members of the Muhammadan community. The latter are less interested in politics than in their own particular religious, educational and economic problems, and even the younger and more ambitious men from time to time find themselves divided between their allegiance to political propaganda and the interests of their community.

Moral and material progress.—2. The wider diffusion of a sound elementary education is at present checked by financial difficulties, but it is hoped that larger grants will be available when the war ends. It is estimated that at present less than one-fifth of the boys of school-going age, who should be receiving elementary instruction, attend the primary schools. The municipalities unfortunately spend less on primary than on secondary education.

The improvement of village sanitation and water-supply has not yet, owing to financial reasons, been seriously grappled with ; the development of village self-government referred to hereafter offers the best hope for the solution of this problem.

Labour has been abundant, and the huge profits which the jute mills gained are reflected in the construction of additional quarters of a good sanitary

*Till the 27th March 1917, when he was succeeded by the Earl of Ronaldshay, G.C.I.E.

type for the housing of their coolies. Owing to the want of ships, emigration to the colonies declined.

Land Revenue.—3. Over the greater portion of the province the Permanent Settlement prevails; any large increase from year to year in the Government land revenue is therefore impossible. The increase (R1,84,839) in last year's demand was due in the main to the settlement of newly-formed or waste lands, and to resettlements and the normal increase of demands in Government properties and in temporarily settled estates. Many estates, *e. g.*, those granted for services rendered to the State or those redeemed by the capitalization of the revenue due, are exempted from the payment of revenue, but from others (97,607 in all) the sum of Rs. 2,77,47,134 was realized, being 14 per cent. of the gross revenue of the Presidency (Rs. 20,64,73,000) in a year when receipts from opium and customs were abnormally high.

In spite of the financial restrictions imposed by the war, the great task of preparing for the whole settled area (63,893 square miles) a complete record-of-rights under the Bengal Tenancy Act was continued by the Survey and Settlement Department; by the end of the year the cadastral (field-to-field) survey had covered 19,486 square miles. The record is a modern Domesday Book and a monumental record of local rights.

An area of 5,639 acres was compulsorily acquired by revenue officers at a total cost of Rs. 71,17,478 mainly for railways, district boards, municipalities and the Calcutta Improvement Trust.

Under the Agriculturists' Loans Acts loans were granted to the extent of Rs. 8,39,291, chiefly in the district of Bankura, where famine prevailed, and in Burdwan and Naokhali, where floods caused severe distress. Cultivators repaid Rs. 11,29,929 advanced under this Act from time to time.

Condition of agriculturists.—4. The condition of the cultivators was on the whole good; an excellent winter rice crop was harvested, restoring prosperity even to those districts which had suffered from famine or severe distress. The area under cultivation throughout the province was estimated at over 29 million acres, of which over 21 million acres were under rice. The prices of rice were not high; the market for jute, the great mercantile staple of Bengal, which covers nearly 2 million acres, remained steady.

The Agricultural Department, which for some years has laboured against conservatism and apathy, received indifferent support from the public for a scheme to provide an elementary training in agriculture for the sons of land-holders. There are signs of increasing interest in its work, but closer and more practical relations with the actual cultivator will only become possible with an increased staff. The post of a third Deputy Director has recently been sanctioned. The last Inter-provincial Jute Conference recommended certain improvements in the cultivation and production of jute; it foresees no great extension in the acreage under jute, unless prices advance.

A jute seed selected from 500 seeds after careful experiments in the Government farms has since been tested in a variety of soils with encouraging results, and a certain amount of the "Indrasail" paddy seed, selected after the careful testing for several years of 2,000 varieties of paddy, has been distributed to cultivators. A demand for these two varieties of jute and paddy seed has already sprung up and steps are being taken for their wider distribution.

Co-operative movement.—5. There has been a notable expansion of the co-operative credit movement, and the prospects of thus solving the great problem of the Indian peasant's indebtedness grow brighter year by year. The movement began at the beginning of the century by the foundation of some 50 pioneer societies, of which a considerable number directed by more zeal than knowledge have long disappeared. To-day there are 47 central banks with a working capital of Rs. 58,89,950, 2,857 agricultural and 169 non-agricultural co-operative credit societies with a working capital of Rs. 67,06,628 and Rs. 25,64,868, respectively, and 13 supervisional unions, *i.e.*, federations of rural societies formed for guaranteeing one another's loans; the central banks have a membership of 6,668, while the agricultural and non-agricultural societies have respectively, 110,961 and 25,582 members.

Co-operation is no novelty in the village community and where a society is small and its members well-known to one another, public opinion imposes a simple code of honour which deprives joint unlimited liability of half its

terrors. For some time past the necessity of founding a provincial bank has been recognized, but there are obvious difficulties in financing such a project at present; in the meantime, steps are being taken to unite the central banks into a federation so as to provide a better machinery for financing them from the capital which is freely available in Calcutta.

At the present moment, it is considered prudent to restrict rather than encourage the formation of new rural societies, unless adequate control can be secured by their affiliation, with a central bank, while the appointment of paid secretaries for these banks is considered desirable for rendering such control more efficient.

The Departments of Agriculture and Co-operation were formerly—in 1907—in charge of one officer; this arrangement is no longer practicable, but the desirability of co-ordination of effort between these departments, which both aim at ameliorating the lot of the cultivator, is fully recognised; during the past year, the one department supplied the means and the other the direction and advice for the extension of potato cultivation and a wider employment of manures. The number of weavers' societies (a depressed and indigent community) increased from 17 to 34; nine new societies were formed by fishermen. It is a melancholy fact, illustrating the futility of socialistic uniformity, that some of these societies used the increased prosperity and capital which co-operative sale and the elimination of the middlemen had won for them, to become middlemen themselves and in their turn to exploit the labour of their less fortunate brethren, who had remained outside the co-operative pale.

Fisheries.—6. The importance of conserving and developing the fisheries of the Presidency on modern scientific lines has received fuller recognition since the initial enquiry of 1906. The Fisheries Department, which was made separate from the Agricultural Department in 1917, is now concentrating upon the improvement and multiplication of the supply in the inland fisheries of Bengal. Much useful work has been done in supplying the public with carp fry for stocking the tanks or large artificial ponds which form the main source of the water-supply in the interior of Bengal.

The importance of developing the inland fisheries is obvious when it is remembered that nearly four-fifths of the total population of the Presidency consists of people who may eat fish, but to whom meat is taboo.

Commerce and trade.—7. In the third year of the war the paucity of tonnage and exchange difficulties left their mark on the foreign trade of the Presidency. The value of its sea-borne trade shows a remarkable uplift,—11 per cent. above that of the previous year and 6 per cent. over the figures of the last quinquennial average,—but the volume of imports has for the most part declined. This tendency is illustrated in the imports of metal, machinery and mill-work, hardware and cutlery, foreign mineral oils, salt and cotton manufactures. The United Kingdom's share in the import trade (merchandise) was 63·8 per cent. against 65·2 per cent. in the previous year; Japan obtained a firmer hold of the piece-goods trade and supplied almost 70 per cent. of the glass and glassware imports,—an advance of 57 per cent. on her trade of 1915-16.

The export trade increased in value, mainly by reason of the unparalleled prosperity of the jute trade, which, however, early in 1917 was so severely affected by the cancellation of Government orders and the difficulties already described that an agreement to work short time at the mills was considered necessary.

Tea had some reverses; the crop was smaller than in the previous year, and though prices reached a high level in Great Britain transport difficulties, restrictions on export and high freights caused some depression in the trade.

The export of hides to the United Kingdom attained dimensions unknown before, although the total volume of the hide and skins trade decreased; the metal and ore trade, particularly the export of manganese ore, flourished; the area under indigo was more than doubled, and the output of coal in Bengal, Bihar and Orissa was nearly 16 million tons.

The United Kingdom took 32 per cent. of the exports, as against 36·1 per cent. in 1915-16; the purchases of the United States increased from 19·8 per cent. to 25½ per cent.

The frontier trade with Sikkim, Nepal, Tibet and Bhutan continued to expand; imports (chiefly live animals, fruits, vegetables, nuts, *ghee*, raw wool, grain, pulse and spices) amounted to Rs. 91 lakhs and the exports (chiefly cotton goods) to Rs. 36 lakhs.

Industrial development.—8. The restriction of imports from Europe, which has enabled the enterprising Japanese to increase their export trade with Bengal a hundredfold, led at first to no spontaneous development of new or minor industries; some expansion of mulberry cultivation and silk weaving and some increased prosperity in petty sugar industries make up the meagre tale. Other factors, however, have since been at work which may have far-reaching consequences in the industrial development of Bengal. Deprived of a market for some of her raw materials, the Presidency has turned to manufacture both for its own needs, and also to assist the over-worked industries of the United Kingdom. Her great hide industry is a case in point. For many years India has exported its hides and its vegetable and tanning materials in the same ships, and not less than 60 per cent. of the total export went to the Central European powers. The Allies want leather, but England cannot cope with the quantity of raw hides which India exports. Bengal has been driven to tan her own hides, and already large tanneries are springing up in Calcutta, new processes of chemical tannage are being examined, and new uses being found locally for Bengal leather. The manufacture of munitions of all kinds, from shells to bolts and nuts, for the armies in Mesopotamia and East Africa is a work of great magnitude, and it has called into being new and important enterprises for producing, with modern machinery, articles which were formerly purchased abroad. What has been already achieved is remarkable; its potentialities can hardly be over-estimated.

Finance.—9. The revenues of the province increased; the five crores increase in the Imperial receipts (Rs. 13,97,31,718) was due mainly to the abnormal yield of the customs dues and the handsome prices realized at the opium sales. The provincial receipts (Rs. 6,67,41,000) show an increase of Rs. 32,81,000, while expenditure declined by more than Rs. 25 lakhs. Income-tax (Rs. 168 lakhs), thanks to the enhanced rates of taxation, yielded more than double the revenue of the previous year. Its incidence is extremely restricted; only 58,338 persons out of a population of 45½ millions were taxed, one person in 1,207 outside Calcutta paying an average tax of Rs. 69, and in Calcutta one person in 52 paying on an average Rs. 609 each.

Police and Crime.—10. In spite of some slight increase the police force of the Presidency is still inadequate, and the proportion of police to the population remains much lower than in other provinces.

The subdivision of large, unwieldy investigating centres and the provision of suitable accommodation for the district police are urgent needs. A building programme costing Rs. 90 lakhs has been approved, but only Rs. 9½ lakhs could be granted for this project in the past year. Recruitment was satisfactory and the health of the force improved—due in part to the distribution of iron cots and mosquito nets in malarious districts.

Several constables and officers were prosecuted by private persons on charges of torture, bribery and extortion; only one in every five cases actually brought to trial ended in conviction. In the opinion of the Inspector-General of Police, the general *morale* of the force is steadily improving.

Crime is still more prevalent than in pre-war days, but dacoities, which swept like a plague across certain districts in 1915, have notably decreased. The energy and skill of the Criminal Investigation Department have assisted the district police in breaking up and mastering several dangerous gangs. The stoppage of trade with Germany and Austria has reduced the illicit supply of cocaine, and led to a remarkable fall in the number of excise cases.

The Calcutta police force has been strengthened by the formation of a third company of civil armed police, and the Commissioner of Police relieved of much detailed administrative work by the creation of two semi-independent city areas under Deputy Commissioners, these again being each divided into two divisions in charge of Assistant Commissioners, who supervise all pure executive work,

Revolutionary Crime.—11. Revolutionary or anarchical crime was checked and to some extent held at bay in the latter half of the past year, but the tale of deliberate ruthless murders planned and executed by the misguided but implacable enemies of the present *régime* is still a long and melancholy one. In all, there were 24 crimes—murder or dacoity—attributed to the anarchists, as against 36 in the previous year.

In January 1916, a Bengali Police Sub-Inspector, attached to the Special Branch in Calcutta, which deals with the anarchical movement, was murdered in cold blood in one of the main thoroughfares of Calcutta; in June of that year, Deputy Superintendent B. K. Chatarji, who by his intimate knowledge of the movement and his faithful devotion to duty was marked out as the victim of those he pursued, was shot dead by five Bengali youths of the middle classes as he was cycling down an important street in Calcutta. An orderly head constable, who accompanied him, shared his fate. Two detectives were murdered in Dacca while on duty. Two persons suspected of aiding the police were assassinated and the head master of a school in a country town was murdered for the same reason in circumstances of the most atrocious cruelty. One of his pupils was ultimately convicted for this crime; his associates escaped In the Tippera district, the villagers offered a brave and stubborn resistance in a political dacoity, planned to replenish the funds of the revolutionaries. They had no weapons that could cope with the revolvers carried by the dacoits and five of them were killed and five wounded; one of the dacoits, subsequently identified as a man who had absconded from the place of domicile assigned to him under the Defence of India Act, died from the injuries inflicted on him by the enraged villagers.

Several convictions were obtained on charges of conspiracy and other crimes, but in the vast majority of cases there are circumstances peculiar to Bengal, which preclude any hope of conviction by the regular courts, though the police may possess convincing evidence consisting of confessions often corroborated in the most unexpected and dramatic fashion by other confessions or incidents—where collusion or the exercise of undue influence by the subordinate police was unthinkable. The confession is withdrawn in the dock; the public, even those who condemn the evil on the platform or in the press will not as a rule give any assistance when actually brought into contact with it, but will, in most cases, prefer to slip away from the scene of a crime to which they might be required to depose; and the detectives before whom phases of the revolutionary movement lie exposed as an open book, are too valuable to be exposed by the publicity of a trial to the revolver of the anarchist. In these circumstances, Government has been compelled to use freely the instrument it possesses in the Defence of India Act—a war or emergency measure passed deliberately with the purpose of dealing with anarchical conspirators and other enemies of the King. The cases of persons against whom action is taken are submitted in every instance to a judge, who advises Government on the probative value of the evidence laid before him. The persons interned or restrained are treated with the greatest consideration; and at the time of writing Government has arranged for an independent tribunal, consisting of a judge from the English Bench and other high judicial and executive officers, to sit in judgment on the materials which the Intelligence Bureau possesses, to decide whether the organized and deep-seated conspiracy to subvert British rule does in fact exist, and if it exists, generally to advise Government on the measures to be adopted for dealing with the position.

Local Self-Government: 12. (a) *Municipalities, Mufassal.*—This Presidency offers examples both of good and of bad municipal administration. Some municipalities conduct their affairs in an efficient and business-like way, giving in their public services extremely good value for the moderate taxation they levy; others are disfigured by party factions, hampered by a fear of taxation and deterred through timidity or partiality from any vigorous exercise of power. The weaker municipalities have been content to levy and collect taxes and provide some of the elementary services for which a municipality primarily exists. They have rarely taken advantage of those provisions of the law, which, in the interest of public health and sanitation,

place irksome obligations on individuals. The exiguity of their resources is constantly urged as the bar to progress in rural municipalities, but the incidence of municipal taxation is everywhere low. In the early days of self-government in Bengal, much was expected from the educative value of self-taxation, but the history of some of the backward municipalities of Western Bengal shows that this influence has had little effect.

It is, however, gratifying to note that the measures taken in the past year to increase the financial responsibilities of Municipal Commissioners, to extend the elective system and generally to relax the slight official control, which can still be exercised, have on the whole been successful. In the past year, 11 of the few remaining municipalities, in which Government appoints the chairman, have been empowered to fill that post by election; three of these bodies preferred that Government should continue to appoint an official chairman, while one municipality, of which the Commissioners are appointed by Government instead of being elected by the rate-payers, protested against the introduction of the elective principle as being unsuited to local conditions. There was some improvement in the collection of rates and taxes, a branch of work in which few of the mufassal municipalities have excelled; the aggregate income amounted to nearly Rs. 57 lakhs, and the expenditure to Rs. 57¼ lakhs. Original works of drainage and water-supply have been curtailed owing to difficulty in obtaining materials and to financial stringency. Of the aggregate expenditure on education (nearly Rs. 2½ lakhs) less than half was devoted to primary education.

(*b*) *Calcutta Corporation.*—Owing to the difficulty of floating a loan, rigid economy was necessary and original works were almost entirely stopped. The year closed with a balance of nearly Rs. 43 lakhs.

(*c*) *District and Local Boards and Unions.*—District Magistrates have hitherto been appointed as chairmen of all Districts Boards (which correspond roughly with the county councils of England), and by virtue of their authority and local knowledge, naturally exercise great influence over the deliberations of the Boards. An important constitutional change was made towards the end of the year by the appointment by Government of an Indian non-official as chairman of one District Board, and at the time of writing the experiment is being extended by the election of non-official chairmen in five of the 26 districts of the Presidency. The District Boards have an aggregate income of nearly Rs. 107 lakhs, and in thus freeing several of these bodies from official control, the Governor in Council has given an earnest of his desire to open up a wider sphere of public work to the people of this province.

The Union Committees—smaller units which deal with groups of villages —have recently shown signs of a vigorous life. Their number increased in the year from 90 to 156. The majority are constituted on an elective basis, and no less than 67 have voluntarily taken advantage of the permissive section of the law to impose taxation within the areas they administer for the improvement of village roads, water-supply and sanitation. They disposed in all of over Rs. 1½ lakhs, of which a lakh was contributed by the District Boards. The Governor in Council believes that the wider scheme of village self-government which is now contemplated will afford in time a sure and stable foundation for an improved system of representative government.

Calcutta Improvement Trust.—13. The work of the Trust received a serious check owing to a High Court ruling (reversed after protracted litigation by a Full Bench), in which it was held that the Act did not authorize the acquisition of surplus lands for purposes of recoupment.

The beneficent and far-reaching consequences of the Trust's operations are already apparent, and it is a matter for satisfaction that the Indian members of the Trust, who were at first disposed to regard themselves in the light of a brake on the over-zealous and unsympathetic efficiency of its executive, have become the most ardent town planners. Building sites are at a premium in Calcutta, and its development demands the effacement and replanning of those insanitary congested areas for which the poverty of Calcutta's early municipal administration and some lack of imagination in more modern times are mainly responsible. The first scheme of the Trust is complete; a slum has been swept away and a splendid specimen of the new

Calcutta set down in its place. The scheme paid for itself. Two great thoroughfares, each over 100 feet in width, are under construction, and a large low-lying suburban area, which had grown up without a design, has been cleared, levelled and planned. The Board spent nearly Rs. 45 lakhs, and at the close of the year had a surplus of more than Rs. 100 lakhs.

Education.—14. No outstanding event marks the educational year. The scheme for establishing a model residential University at Dacca, which was approved by the Secretary of State in 1913, has been postponed, pending the report of the Commission on University Education in Bengal now sitting at Calcutta under the Chairmanship of Dr. Michael Sadler, Vice-Chancellor of Leeds University. The foundation at Rangpur of a new private college, which bears Lord Carmichael's name, may also be mentioned.

In collegiate education, the most pressing need is perhaps the provision of well-designed and well-supervised hostels. The increasing demand for University education every year sends thousands of students to Calcutta who clamour for admission into colleges, which are already overcrowded. Oxford and Cambridge have each some 5,000 students to house and control; out of 15,000 University students in Calcutta, there are nearly 5,000 over whose residence the University exercises no kind of control, and of these nearly 2,000 reside in overcrowded and insanitary lodgings which drive their occupants out to seek recreation and excitement in the temptations of a great city or the troubled politics of Bengal. The Government of India since 1911 have allotted no less than Rs. 26 lakhs for providing proper hostels in Calcutta, but some limit must be set to such expenditure by the State and it is hoped that the Commission may evolve some alternative scheme for coping with this growing evil.

Elementary education presents a problem of no less importance. In nearly 32,000 primary schools, instructing roughly 1,125,000 boys, there are 29,000 totally untrained teachers, whom it would take 40 years to instruct in the existing training institutions. In about 2,500 secondary schools instructing about 375,000 pupils, only 3,000 out of 17,000 teachers have studied in any degree the art of pædagogics. Elaborate schemes have been framed to remedy this serious defect in the educational system when normal financial conditions return.

The further expansion of female education is largely a question of funds. The number of institutions of all classes for Indian girls and women is nearly 9,000 with 270,000 pupils, of whom rather more than half are Hindus. The paramount need is a steady supply of trained teachers, and schemes for establishing more training schools and classes are ready.

CHAPTER VII.—UNITED PROVINCES.

Lieutenant-Governor:

SIR JAMES S. MESTON, K.C.S.I.

General Conditions.—1. Sharp as was the rebound in the previous year from scarcity conditions, there was still a margin for further advance, and the recovery was complete in all parts of the province, except in the least favoured districts of the west. In the western divisions, agriculture, which is the principal source of wealth of the provinces, suffered at the beginning of the year from shortage of rain and canal water, but Oudh and the southern and western divisions had an exceptionally good spring harvest. The monsoon of 1916 though more evenly distributed than that of 1915, was heavy, the crops at this season, with the exception of rice, were damaged by excessive rain, more particularly cane and cotton, and the yield on the whole was moderate. Floods caused considerable damage in the Ganges valley east of Allahabad. Measures of relief of rent and revenue were given in the areas affected. Prices eased off slightly from the high rates of the previous year, but not so as to deprive the cultivators of handsome profits, over crop areas that were, if anything, slightly, above the normal. The autumn rainfall was favourable to an extension of sowings of the next spring crop, and on the whole the cultivating classes had a good year. The condition of agricultural labourers improved, but the educated classes, especially those with fixed incomes, were hit by the high prices of necessaries.

Trade and Industries.—2. Trade again increased, but did not reach its pre-scarcity volume in 1912-13 : the expansion was most marked under exports (mainly of agricultural produce, such as grain, sugar, and opium) which exceeded imports considerably. The war stimulated enormously the export of shellac, indigo, saltpetre, and hides, but that of wheat declined by one-third. This was in the main the result of short sowings—the heavy and late rain of 1915 had hampered the preparation of the ground over one-tenth of the harvest area—but was in part perhaps attributable also to the holding up of stocks. Sugar, which ranks second to grain as a staple export, also declined, but to a smaller extent, the produce and area both having been affected by unfavourable seasons in the principal cane districts. The indigo area was trebled, but dull markets in Calcutta deprived the manufacturers of the large profits expected, and the prices paid to the cultivators were not high. The cotton crop was a failure all over India, and in these provinces the failure hit the cultivators and factories alike. The latter were compelled, in fact, to reduce their output. In other industries, while the supply of raw material was adequate, inability to import machinery and plant was a serious handicap; sugar and oil mills and engineering work were the chief sufferers. In this respect the war has undoubtedly emphasized the dangers of too great a dependence on imports from foreign countries. The Cawnpore textile mills and tanneries were entirely occupied in the execution of military orders and had a prosperous year, particularly the latter.

Under imports the most notable increases were in coal for industrial purposes at Cawnpore and elsewhere, wool for war orders at Cawnpore, and brass for utensils for the general population, now recovering from the effects of 1913-14 scarcity; but against this has to be set a considerable decline in the volume of sea-borne imports such as iron, other metals and cloth. With reduced supplies the prices of these articles naturally rose; and in the case of cloth the rise has undoubtedly been a source of some hardship to the poorer classes. In some minor directions supplies were made good from America and Japan and to a lesser extent Australia. American motor cars and Japanese goods, such as matches, toys, sweets, beer, haberdashery, etc., were much in evidence. Government was also able to assist a few local industries, notably glass and bangle-making and also fruit packing and bottling, jam-making, and the manufacture of indigenous dyes to replace those of outside origin, the

supply of which had been cut off. Of more permanent importance perhaps is the special inquiry initiated by the Agricultural department into the possibility of manufacturing morphia from Indian opium. Asia Minor has hitherto been the source of supply for this article, but if the experiments now in progress are successful, the province will have secured a very valuable industry.

The War.—3. With the data now available it is possible to affirm that the war had considerably less effect on the prosperity of the general population than the scarcity immediately preceding it. Beyond the short supply of metals, cloth and other sea-borne commodities, and to a certain extent the high prices of food, the general public has felt the influence of the great European conflict but slightly. Some disorganization was inevitable on the outbreak of the war, but that stage is now past: the people have now settled down to their usual occupations and have adapted themselves to whatever changes have occurred. Had there been no scarcity in 1913-14 the war as an economic factor would have attracted less attention than it has done in previous years.

Apart from its economic aspect, the war has evoked a general spirit of loyalty to the empire throughout the province. Including combatants and non-combatants, its contributions in men amounted to double the number already in military service, and the improved arrangements since inaugurated have shown that, though before the war a minor recruiting area, it is prepared to furnish quotas of recruits far in excess of what a few years ago would have seemed possible. A large sum was subscribed by the public to the United Provinces War Fund, in addition to minor aid to the Imperial Indian War Relief, Red Cross, and other funds. The three native States supplied Imperial Service troops and other detachments, and a military hospital. There was no internal disorder arising out of the war and no prosecution for sedition, and the machinations of revolutionaries from Bengal and elsewhere were successfully countered.

Politics.—4. Amongst the educated classes interest centred chiefly round the possibility of a further extension of self-government, and the discussions on internal politics overshadowed and diminished concern in the war. In the press the Home Rule propaganda of Mrs. Besant, the memorandum of post-war reforms drawn up by the nineteen members of the Supreme Legislative Council, and the Congress and Muslim League joint programme were the chief topics. Political agitation, however, was generally restrained and repressive measures were few. The conservative Muslim organs advocated a policy of "nationalism" under the British flag, and practically all sections looked to the British Government for their future advancement.

Finance.—5. The budget of 1916-17 was, like its predecessors, a war budget, which aimed deliberately at retrenchments and economies all round. Expanding departments were compelled to maintain the *status quo* and numerous reforms, some of considerable urgency, were postponed. For reasons, however, which it was impossible to foresee at the time of its preparation, the forecasts on which it was based proved to have been unduly pessimistic. The budget had estimated for a slight excess of expenditure over income, but in fact the balance in hand at the close of the year was nearly ten times the prescribed minimum. One quarter of this balance included sums earmarked for education, sanitation, and general administration, which will be spent in due course. One-tenth is accounted for by unexpected additions to the opening balance brought over from the preceding year. There were also, however, considerable additions to income and savings that could not be foreseen at the time of preparing the estimates. The receipt side benefited considerably from the continued growth of the prosperity of the people in spite of war conditions, as is evident from the increased revenue under excise, and to a less extent under stamps and income-tax. The forest, for reasons explained below, produced an unprecedented income, and the strong demand for and full supply of water augmented the income from canals. The savings on the expenditure side, too, were considerable, though short of the unexpected increases in receipts. In actual practice, it was found possible in nearly all departments to carry economy farther than the budget had anticipated. There was, naturally, no expenditure on famine relief, and the grant for that purpose remained in hand. Moreover,

Government was hampered, equally with the public, by scarcity of iron work, machinery, and engineering plant generally.

The financial position of municipal and district boards also improved; in this sphere there was less need for retrenchment and expenditure rose a little, though the balance in hand did not decrease.

Litigation.—6. One of the chief features of the year was the growth in the volume of litigation in the revenue and civil courts. In part the explanation is to be found in the renewed prosperity of the province; but as regards the revenue courts at least it would be unwise to assign too great an importance to this factor. Other and more deeply seated causes are clearly here at work. The expansion is undoubtedly connected with the growing pressure of the population on the soil, and with the rise in prices which has been practically continuous since 1904. The new Tenancy Bill which is at present on the anvil, aims at mitigating the effects of these conditions. The rise in civil court litigation which has been more or less continuous for a considerable period is largely attributable no doubt to the growing wealth of the provinces, but here too other causes are probably in operation. Amongst these may be conjectured the movement towards individualism, the increasingly commercial character of relations between individuals and classes, and the advance in industrialization.

Excise.—7. The economic recovery of the province is reflected also in the record revenue under the head of excise, a result which has been attained by raising duties rather than consumption. While public opinion is not ripe for prohibition and facilities for illicit manufacture abound, the policy of Government is to control consumption and to supply a sound article for the moderate consumer.

Police and Crime.—8. The volume of crimes declined, especially under the head of offences against property. Unfortunately there was a further rise in the number of dacoities. The increase in this form of crime has been continuous since 1914 and constitutes a serious menace to the peace of the province. In itself the problem is far from being insoluble. A more efficient police force should be capable of handling dacoity effectively. But efficiency means better control and larger expenditure, and with a superior staff seriously depleted and in a period of forced economy these conditions have naturally not been fulfilled. Partial effect, indeed, was given to the scheme for improving the pay of constables, but the need for higher emoluments is not confined to the rank and file: it is no less urgent in the case of the gazetted ranks, and a very heavy expenditure will have to be incurred to secure the efficient and contented force which alone can guarantee the province against outbreaks of organized crime.

Agriculture.—9. Agriculture is and will always be the great industry of the province. It is therefore gratifying to find that the landed classes are more and more realizing the advantages of developing the resources of the soil: not a few private gentlemen now maintain their own experimental farms, and others are sending their sons to the Agricultural College which up to a few years ago had attracted only candidates for Government service. The educated classes of the towns, too, who have hitherto not displayed much interest in agriculture, are beginning to appreciate its possibilities as a profession.

A better seed and water-supply is one of the most urgent of our immediate agricultural needs, and it was decided, therefore, to utilize for the purpose the grant given by the Government of India from the proceeds of the wheat sales. Much attention has been devoted of late to improving the breeds of milch and plough cattle, and in this direction steady progress was made during the year. Efforts were also made to foster the breeding of horses and mules, the demand for which has been greatly stimulated by the war.

The Co-operative Movement.—10. Agriculture is likely to benefit greatly in the future by the growth of the co-operative movement. Members of the public interested in agriculture have begun to realize the possibilities of the societies in this matter, and have given the department much assistance. No attempt is being made at present however to add largely to the number of rural societies. The severe tests to which they have been subjected of late by the scarcity of 1913-14 and the rise in prices have shown that many of them were

lacking in stability; and for the moment consolidation and not expansion is the aim of the department. Members have still to learn to identify their interests with those of the society; till this lesson has been thoroughly mastered progress must inevitably be slow. But the movement has come to stay; the confidence of the investing public is undiminished, as is evident from the fact that deposits have had to be refused; and further developments are simply a matter of time.

Forests.—11. The cessation of imports led to a great demand for the timber and turpentine of our forests. Large quantities of timber and sleepers, tanstuffs, and materials for the extraction of acetone, acetic acid and methyl alcohol were supplied to the military and ordnance departments. The outturn of turpentine has already been greatly increased, and is capable of further expansion; and the provinces ought and undoubtedly can be made largely independent of foreign imports of timber and certain other materials. It is even possible that they may become a supply centre, as regards some products, for the rest of India. The financial results this year have been extremely gratifying and the growing revenues of the department promise in future to yield a very substantial addition to provincial revenues.

Public Health.—12. The health of the province was on the whole better than in the preceding year. The cholera prevention scheme, which was introduced as an experiment some years ago in 20 districts, broke down owing to the lack of disinfectants. It had given apparently good results in previous years, and there is at present no intention of abandoning it. Luckily the incidence of the disease was light. The mortality from plague also declined.

Local Self-Government.—13. In the sphere of administration the chief event of the year was undoubtedly the passing of the new Municipalities Act. This took effect from the 1st of July, 1916, and was thus in operation for nine months of the period under review. Its principal feature was the abolition of official chairmen, and direct official control. Central control has been retained; in this respect the Act merely follows the practice of all modern States; but in future the municipalities will enjoy a measure of autonomy at least as liberal as that permitted to urban authorities in any other country. Provision was made at the same time for certain internal reforms which experience had shown to be essential. Plurality of control is not conducive to efficient administration, and boards and committees are not capable of handling successfully the details of executive work. The new Act accordingly reserves to Government the power to insist on the appointment of an executive officer in the large towns, who will work under the control of the chairman. In the smaller municipalities the chairman can be his own executive officer, but the appointment of separate officers for this purpose is permissible, and several boards have already of their own accord made such appointments. The boards will still retain in their own hand the powers of legislation and general control, but they will be freed from a mass of details, and can devote themselves to matters of broad policy. On the whole the new Act was a popular measure. There were difficulties at the time of its passing on the subject of communal representation, and in some of the boards the ill-feeling generated took the form of resignations by the Hindu members as a mark of protest. The method adopted for securing the due representation of Muhammadans was the result of a compromise. The proportion of Muslim members was fixed on the basis of population, subject to certain additions where it fell below a certain figure. Devices of this kind are always open to criticism, but in the circumstances compromise was inevitable, and there seems now to be a general disposition to acquiesce in the *fait accompli*. The new constitution has been in force for too short a period to allow of any definite conclusion being framed, but it is hoped that the wide powers granted will evoke in the electorate and its representatives a corresponding sense of responsibility, and that the public will recognize that their interests will best be served by voting for men who will work for the common good. The educated classes are on their trial; and it rests with them to make the new departure a success.

Education.—14. The district boards were engaged throughout the year in carrying out schemes designed to give effect to the orders issued in 1914 on the subject of primary education. The main features of these schemes are the

provision so far as practicable of a school within three miles of every village, the adoption of the upper primary course as the minimum standard of elementary education, more adequate staffs of teachers, the lengthening of the Middle Vernacular course, a revised curriculum and a strengthened inspectorate. The last reform has had to be postponed owing to war conditions, and great difficulties are being everywhere experienced in obtaining an adequate supply of teachers. The schemes nevertheless mark a great advance. A considerable number of new teachers are being added, and in general the foundations of a sound system of elementary education have now been laid. In female education the outlook is less hopeful. As has been repeatedly pointed out, real and sustained progress is impossible without a change in the attitude of the people. The indifference, apathy and even hostility of the general public have hitherto largely nullified all our efforts. The history of the schools for girls maintained by the local bodies is mainly a record of wasted expenditure. Somewhat better results have been achieved by the secondary Anglo-Vernacular schools, but even here the results are disappointing. It has not hitherto been the practice for Government to start such schools of its own, and there is much to be urged in favour of leaving this branch of education to private effort liberally subsidized by State funds. But the logic of events has forced a reconsideration of the traditional policy in this matter. Such demand as there is for female education is to be found amongst the educated middle classes: the aided schools have not so far catered satisfactorily for this demand, and a Government institution with the larger resources of the State behind it might prove the starting point of a fresh and notable advance. In the budget debate in March, 1917, the Government accordingly announced its intention of establishing in Lucknow a high class Anglo-Vernacular boarding school for girls. The expenditure will be very considerable, but the experiment will at least furnish a test and a measure of the extent and sincerity of the demand for female education.

There is no subject on which complaints in the press and on the public platform have been more frequent than the supposed inadequacy of the accommodation in the high schools. In the case of Government schools very large sums have been spent of late years on the construction of new, and the extension of the existing buildings; and liberal subventions for similar purposes had been made to aided institutions. Nevertheless it has been continually alleged that annually crowds of students are refused admission and Government has been urged to open more schools, or in the alternative to lower its standard for admission. The report of the Committee appointed in March, 1916, to examine and report on the question was received towards the end of the year. The statistics attached to that document show clearly that the supposed shortage has, to say the least, been enormously exaggerated. Such congestion as exists is purely local. The widespread impression to the contrary is merely the result of the popularity of certain schools which attract a larger number of applicants than can secure admission. The Committee's figures have not carried conviction in all quarters, but arrangements have now been made to apply a definite statistical test which should set all doubts on the matter at rest.

CHAPTER VIII.—PUNJAB.

Lieutenant-Governor.

SIR M. F. O'DWYER, G.C.I.E., K.C.S.I.

The War.—1. During this year which saw the great war well on into its third year, the Punjab continued to justify her proud title of the Sword-arm of India. Fully one-half of the combatant forces of the Indian Army on the 1st January 1917 came from the Province and this proportion has been well maintained in the great recruiting rally of the past few months. The Punjab can claim a substantial share in the arduous campaign which culminated in the capture of Baghdad thus crowning the Mesopotamian winter operations of 1916-17, and the two Victoria Crosses won by Punjabis during the year are only the most notable among numerous other distinctions gained in various theatres of the war. Nor did the people of the Province lag behind their fighting men in loyal endeavour. Contributions in money and kind in aid of the war continued to pour in and by the end of the year more than 40 lakhs of rupees in money alone—not counting innumerable articles for the comfort of the troops—had been subscribed for the various objects mentioned in last year's report. One-third of this total was contributed by the Punjab Native States, the ruling princes and chiefs vying with one another in munificent gifts from their private and public revenues. In men too, as well as in treasure, the Native States have given of their best, from the thousands put in the field by populous and wealthy Patiala to the little band of fifty, under the uncle of the chief, supplied by the ancient hill state of Suket. Of the 24,000 Imperial Service Troops in being at the commencement of 1917 no less than one-third belong to the Punjab, and the cavalry and infantry of Patiala, the infantry of Jind and Kapurthala, the camelry of Bahawalpur and the sappers of Maler Kotla, Faridkot and Sirmur, have won honour for their States and earned the gratitude of the Paramount Power. In other fields also than those of war, the Province has lived up to its reputation. There was a complete subsidence of political unrest, while the assistance rendered by the people in the suppression of crime, and their loyal co-operation have been assets of incalculable value. Nevertheless the task of administration has been no light one : the protraction of the world-wide conflict has brought with it a multiplication of serious problems and an enormous increase in work of all kinds, while the cessation of recruitment from home and the surrender of over 200 officers of various departments for the army, have put a serious strain on the services which they have, however, borne with devotion and success.

Crime.—2. There was no recrudescence of the lawlessness directly associated with the old revolutionary movement, and the second Supplementary Lahore Case, the Mandi State Case, and the Rawalpindi Bomb Case, in all of which justice was fully vindicated, were only the aftermath of the *Ghadr* conspiracy of previous years. The year in fact marks the complete disappearance of the serious disorder and lawlessness of 1915, and there is good reason to believe that the administration is gaining steady success in the struggle against crime and the criminal, the result of which up to 1912 was a cause of serious anxiety. Numerous reasons are advanced for this general improvement in the situation, such as the subsidence of political unrest, the special measures taken to cope with wandering criminal bands and the diversion of the energies of the wilder spirits into the various spheres of military activity. Full justice should, however, be done to the increasing support and co-operation afforded by the people themselves who have been quick to appreciate Government's serious pre-occupations elsewhere and to realize their own responsibilities in assisting to maintain law and order. Government for its own part has not been slow in according prompt and generous recognition of valuable service in the suppression of crime : large cash rewards, grants of State lands and remissions of land revenue have undoubtedly done much to encourage the people to accept the risks which resistance to and pursuit of dangerous criminals so often involve. But no increase in public confidence would have been obtained had not the police shown themselves worthy of it. Each succeeding year has displayed a notable

advance in the *morale* of the force and throughout the stress of the late critical times Government has been able to rely with confidence on its loyalty and efficiency. By the end of 1916 a strong central agency under a special officer had been formed to deal with the registration, restriction, and reclamation of the criminal tribes who were responsible for so much of the crime in the rural districts of the Province. In addition to existing settlements for the members of these tribes at Danepur (Lahore), Changa Manga and elsewhere, a central reformatory was established at Amritsar, and a large industrial settlement in connection with the New Egerton Woollen Mills at Dhariwal. Other industrial settlements were started at Shahdara near (Lahore) and Bhiwani in the Hissar District, and the formation of several agriculture settlements is contemplated. The new system should have far-reaching results : even in the short time which elapsed before the close of the year under report, the success attained was remarkable.

Agriculture.—3. On the whole the year was one of general prosperity and development for all classes in the Province. The monsoon of 1916 was unusually active and widespread and was followed in the beginning of October by heavy rains which were very favourable for the sowing of the spring crops. The result was that the harvests of 1916-17, though they fell short of expectation especially in the spring harvest which was prejudiced by the failure of winter rains, were a great improvement on those of the preceding year. There was a small rise in the price of wheat and cotton mainly owing to large exports; and prices generally still remained affected by the war. The average price of land continued to rise and the benefits of the Land Alienation Act are displayed in a further decrease in the area of cultivated land mortgaged. In a few districts, labour was scarce owing to continuous recruitment for the army, but wages were good, and in spite of the war, and perhaps to some extent in consequence of it, the agricultural condition of the Province was distinctly prosperous.

The Department of Agriculture is securing in a growing degree the confidence of the agricultural population. Its activities in the year under report were increasingly varied and extensive, and a great future is anticipated for it. The experiments and demonstrations in implements and methods at the Lyallpur and Gurdaspur farms, and the demonstrations at fairs and on private farms throughout the country are producing noticeably excellent results, while the success of the department in popularizing well-established varieties of seeds is evidenced by a quadruple increase in the area under American "4-F" cotton and Punjab "11" wheat. Attention is also now being paid to the important question of the transport and marketing of agricultural produce, and the first steps were taken in connection with cotton : representatives of the great cotton exporting firms and Indian growers and dealers were consulted, and measures were considered to prevent adulteration by producers and to secure an adequate price for Punjab American cotton in the wholesale market. A notable feature of the year's work was the successful completion of the experiment in reclamation of saline land at Narwala which marks a definite stage in the solution of a problem of enormous importance to Punjab agriculture. A scheme for the reclamation on similar lines of a very large area on the Lower Bari Doab Canal is under consideration.

Trade and Industry.—4. But though the Punjab is still mainly an agricultural province, it contains rapidly growing commercial and industrial interests, and these shared in the general return of prosperity. A record number of operatives was employed in the big railway workshops and numerous cotton ginning factories of the Province, owing to large war orders and a bumper cotton crop respectively. The balance of trade also, which was badly upset in the first year of the war, recovered somewhat in the second, and still more in the year under report, and though the total volume is still less than before the war, the value has owing to high prices practically regained its previous level. This general prosperity is further reflected in the increase in receipts from income-tax (not solely due to the enhanced rates) and non-judicial stamped documents, and in the remarkable expansion in the extent and value of registered sales and mortgages in the last few years. The increasing popularity of immoveable property—particularly of urban land—as a field for investment, shows how little the material prosperity of the Province has been affected by the war, and is a remarkable proof of the general confidence in the stability of existing institutions.

Public health.—5. The year was on the whole healthy as well as prosperous. There was an outbreak of malaria as a result of the heavy monsoon rains, but cholera was almost entirely absent and the incidence of plague was the mildest since 1900. Consequently the death-rate dropped to 30·7 *per mille* or 1 *per mille* less than the average of the quinquennium. The birth-rate rose to 45·6 *per mille* and was the highest recorded in India during the year and the highest in the Punjab for the past 14 years.

The number of dispensaries in the Province is still inadequate; but war conditions continue to hamper expansion in this direction, though much more could be done if District Boards and Municipalities insisted on the payment of fees by the well-to-do. Increasing attention is being paid to the treatment of women, and especially to augmenting the supply and improving the quality of women workers. The new Punjab Medical School for Women at Ludhiana has not hitherto attracted the number of non-Christian girls hoped for; but schemes are under consideration for the improvement of the female Sub-Assistants' service, the constitution of a Central Midwives' Board, and the establishment of a Midwives' Central Training School.

Irrigation.—6. The year was marked as the first complete year of working of all three canals of the Triple Canal Project and by the closing of their construction accounts with an expenditure of nearly £7 millions. The enormous extent of irrigation in the Punjab is indicated by the following figures. The gross revenue of the department during 1916-17 (over £2½ millions) was 38 per cent. of the whole of the revenues collected in the Province. The total area irrigated increased during the year by nearly three-quarters of a million to 9 million acres and the estimated value of the crops raised on this area by nearly £3 millions to over £20 millions. Of the irrigated area 8 million acres received water from perennial and 1 from inundation canals, through over 4,000 miles of main and branch canals and nearly 15,000 miles of distributaries. Further extensive developments are under consideration.

Land Revenue.—7. The re-assessment of one district was started during the year and that of four brought to a conclusion. Great leniency is shown in these assessments: Government has in many of its recently settled districts taken considerably less than half the theoretical standard of half net assets, and its share of the gross produce has of late rarely exceeded 10 per cent. Further when times are bad and seasons unfavourable, suspensions and remissions of the fixed demand are liberally granted.

Court of Wards.—8. The Court of Wards had 50 estates under management at the close of the year under report, with total assets of £2,850,000 and liabilities of only £86,000.

Co-operative credit.—9. Co-operative credit is a subject of growing importance. The year was again one of consolidation rather than expansion, there being no marked change in the number of societies or in the amount of capital invested in them. On 31st July 1917, the societies numbered 3,495 with 138,245 members and a working capital of £1,300,000. Practically all the societies were subjected to systematic inspection by the Registrar and his assistants, and their generally flourishing condition in spite of the abnormal financial conditions created by the war is evidence that they are working on sound lines.

Forests.—10. In the forests of the Himalayas and the irrigated plantations of the plains the Punjab possesses immense potential sources of wealth of which sufficient advantage has not yet been taken. Exploitation has no doubt improved of late years, but the gross income of £113,000 obtained in 1916-17 can only represent a fraction of what could be produced by the 7,211 square miles under the Forest Department's control. These facts have long been recognized, but the Department with its present staff has done all that was possible. The prospect, however, of a largely increased demand for timber after the war has produced the necessary stimulus; a scheme for the re-organization of the superior cadre has been approved by the Secretary of State and will be introduced gradually as finances permit, and provision has already been made for a second Conservator in 1918-19.

Excise.—11. Perhaps the most noticeable feature in the excise administration of the year was the greatly enhanced demand for Indian-made liquor, particularly beer: the result was a record liquor revenue of £336,000, and an

increase in the total excise revenue by eight per cent. to £500,000. Apart from beer, however, which is mostly drunk by British troops, there was no marked increase in the consumption of liquor: the consumption of country spirit has in fact declined by nearly 15 per cent. in the last four years. There is every reason for satisfaction with this rate of progress; it is no doubt largely due to the increase in the duty which took place in 1915, but in part also to the efforts made for some time past to discourage intemperance by the closing down of shops, the discontinuance of fair licenses and other similar measures, matters which command unceasing and anxious attention from Government. The opium revenue of just over £100,000 was slightly larger than in 1915-16, despite restrictions placed on the issue of excise opium in order to check smuggling. Excise opium fetches very high prices in Burma, and smuggling, especially through the Native States, is so profitable that a widely ramified organization has grown up to defeat the law. A special bureau is, however, at work, much valuable knowledge of the illicit traffic is being acquired and the whole question is receiving consideration.

Education.—12. Remarkable progress is disclosed in the current report of the Director of Public Instruction, dealing with the quinquennium ending 1916-17. The annual expenditure on education has risen from £460,000 to £726,000, the number of students from 381,000 to 477,000 and of institutions from 7,400 to 9,400. This expansion has been equally shared by all branches of education. The number of trained teachers has almost doubled and there has been a distinct improvement in their pay and prospects and consequently in the standard of their attainments and the quality of the teaching. The number of students in Arts Colleges has risen from 2,462 to 4,221 and the annual recurring expenditure on these institutions has increased by 78 per cent. The expansion in professional and technical education has been no less remarkable; the practical-minded Punjabi has learnt the value of the training given by the Medical, Veterinary and Agricultural Colleges, the Mayo School of Art, and the various technical and industrial institutions of the Province, and the demand for graduates from them increases every year. Steady progress is being made in the field of female education. The results already achieved are largely due to the improved efficiency of the schools (the number of women teachers under training has increased five-fold since 1911-12), and to the practical nature of the instruction given. Indian public opinion is now undoubtedly much more favourable, and education is beginning to be valued by parents as tending to improve the prospects of their daughters in after life.

Local Self-Government.—13. There is little of note to record in the sphere of local self-government: the attitude of both rural and municipal voters towards the colourless machinery of voting register and ballot box is still largely one of indifference or distrust, and keen contests—with their far too frequent accompaniments of bribery and corruption—are only witnessed when personal or sectarian feelings are aroused. Nevertheless the right men are frequently chosen, and local bodies are on the whole discharging their duties with moderate efficiency.

Suppression of bribery.—14. Towards the end of the year, Government, moved by the undoubted prevalence of bribery and corruption in the provincial and subordinate services, issued broadcast to every village in the Province a proclamation, in simple yet forcible language that all could understand, inviting the public to assist Government in the eradication of this evil. It was pointed out that bribe-taking could only stop when bribe-giving ceased, and that it was with the public therefore that the remedy rested. The proclamation went on to exhort the people to combine with one another in refusing to give bribes or perquisites to officials, and concluded with a warning against those who fabricated false charges of bribery. Various persons were prosecuted during the year for accepting bribes.

Finance.—15. The finances of the province are on a thoroughly sound footing. The total revenue raised in 1916-17 rose from six to nearly seven millions sterling, of which the Provincial share was almost exactly half; while expenditure fell from just over to just under four millions, the province being debited with a little over 3 millions. Thus with a substantial increase in income and a tight hand kept on expenditure the close of the year saw the provincial balance practically doubled. At the end of the year 1916-17 it stood at £814,000.

CHAPTER IX.—BURMA.

Lieutenant-Governor.

SIR S. H. BUTLER, K.C.S.I., C.I.E.

General Conditions.—**1.** The history of Burma in 1916-17 is that of a Province whose prosperity depends very largely on the demand in the world's markets for the commodities it produces in the third year of a war which, while it had profoundly disturbed the organization of trade, had caused a greater demand for these commodities.

It would be idle to claim that the Province enjoyed the same prosperity as in favourable years before the war. Though both crops and prices were better than in the previous year, yet, owing to the prolongation of the war, money was tighter. In Lower Burma there was a considerable increase in the area of land under mortgage, and, in consequence of mortgagees pressing for the return of loans, a striking increase in the area of land sold. Tightness of money and the high prices of imported articles cramped local trade. The high prices of imported cotton piece-goods and yarns were felt, to some extent at least, in every household. But, generally, the Province enjoyed conditions of comparative prosperity. The improved economic conditions synchronized with an improvement in the health of the people. The death-rate compares exceedingly favourably with that of the previous year, and was the lowest for the year for any Province in India except Madras. The only considerable epidemic disease was an outbreak of plague, confined to the towns. The Provincial birth-rate, for some unaccountable reason, was lower than in the previous year.

The wealth of the Province is made manifest by the raising during the year of a war gift of R29 lakhs, in addition to large subscriptions to the War Loans. The loyalty of the Province is evidenced by the fact that, in response to the desire of the Burmese to serve as soldiers and take a share in the war, a company of Military Police, a battalion of infantry and a labour corps were enlisted during the year, and additional battalions of infantry are now being and about to be raised. The keenness of the Burma Military Police to volunteer for war service continued unabated. A contingent of Military Police mounted infantry was sent on active service as a self-contained unit, in addition to numerous drafts sent to Indian regiments at the front.

Agriculture.—As the vast majority of the population depends on agriculture, the two main factors in the material prosperity of the people are the crops and the prices current for agricultural produce. In 1916-17 both crops and prices were distinctly better than in either of the two preceding lean years. In Lower Burma the monsoon was a favourable one, and, except in the Arakan Division, the year was a good one, much less damage than usual being caused by floods. In Upper Burma, in spite of unfavourable conditions at times and in places, as is inevitable in a country of sparse rainfall, the season was on the whole a fair one. The favourable weather conditions are reflected in the statistics relating to agriculture. The area under cultivation, 14,415,000 acres, and the area on which a matured crop was grown 13,745,000 acres, are both the highest on record for the Province. In Lower Burma the rice-crop was good. The general shortage of food-stuffs in the world combined with a recovery from the disorganization of trade that followed the outbreak of war, resulted in much better prices being realised than in either of the two preceding years. In Upper Burma, crops of sesamum and groundnut were good and realized excellent prices. In response to favourable prices in the previous year, the cultivation of both cotton and white beans had expanded, yields were good and, thanks to the strong demand from England, prices were phenomenally high. There was a marked increase in the area under both chillies and onions, and prices continued to rule high. So, throughout the Province generally, crops were good and prices good. For the second year in succession the toll levied by cattle disease was extraordinarily light. Thus the year was a prosperous one for the cultivator and the classes depending

on agriculture. The returns of railway traffic and the statistics for the registration of deeds bear witness to the improved conditions during the year.

Among numerous experiments with a multiplicity of plants, the most economically important research work done by the Agricultural Department was the development of improved strains of paddy which will combine high yielding capacity with suitability for the European market. The most promising result of experiments with imported cottons is a cross between Broach cotton and the long-lived Burma variety, which, it is hoped, will combine the finer and longer staple of the former with the larger outturn of the latter. Large quantities of seed of selected varieties of paddy were distributed during the year.

Co-operative Credit.—2. The Co-operative Department continued during the year, on a larger scale than ever, its work of teaching the value of organization and proper methods of business, and of demonstrating the benefits of co-operation, and so helping the Burmese to hold their own in rapidly changing economic conditions. The steady expansion of the movement, which has been so conspicuous in recent years, persisted in 1916-17, and there were at the close of the year a total number of 2,575 co-operative societies of all sorts. The vast majority of societies are, of course, agricultural credit societies. The expansion during the year would have been much greater but for the effect of the war in limiting the extent to which the Upper Burma Central Bank, which holds the fluid resources of the whole co-operative movement, could increase its funds.

Forests.—3. The exploitation of the natural wealth of the Province was prosecuted with energy. The year was a busy one in the forests. The urgent need of timber of all sorts in Mesopotamia, and the strong demand for teak in India owing to the requirements of the Military Department and the impossibility of obtaining metal building materials, combined with the fact that the season was a favourable one for the extraction of timber, resulted in a marked increase in the quantities extracted both of teak and of other sorts of timber. There was also increased extraction of fuel, owing to the difficulty of obtaining coal for the railway engines and steamers of the Province.

Mines.—4. In mining, too, there was unusual liveliness. In the previous year, owing to the clamant need of wolfram for the manufacture of high-speed steel, there had been remarkable activity in wolfram-mining, especially in the Tavoy District. This activity was enhanced in 1916. The local Government took special measures to increase the output. The staff of officials was strengthened. The shortage of labour was met by the importation of Indian and Chinese coolies by Government agency. Large sums were expended on improving communications. In response to these measures the output of wolfram increased markedly. In the Northern Shan States, the Burma Mines Company, in spite of being hampered by difficulty in importing materials, made immense strides in developing the mines at Bawdwin. The output of both silver and zinc was vastly increased, and that of lead more than maintained.

The activity in tin mining, which has marked the last few years, was in 1916 more in evidence than ever. The expectation that this industry will expand very much beyond its present limits is made more probable by the discovery during the year of valuable deposits of tin in the Thatôn District.

Apart from these new developments, the normal exploitation of the mineral wealth of the Province proceeded apace. The output of petroleum, 232 million gallons, is the largest on record. Prospecting for minerals, especially for wolfram in Tavoy, was remarkably active.

Trade.—5. In spite of the fact that a phenomenal rise in prices makes it difficult to compare the volume of trade with that of previous years, it is beyond question that, in 1916-17, the trade of the Province made an appreciable recovery from the set-back immediately ensuing on the outbreak of war. The aggregate value of the sea-borne external trade of the Province during the year was R69,88 lakhs, a figure 22 per cent. in advance of the previous year's, and exceeded only in the particularly prosperous years 1912-13 and 1913-14. The improvement in trade took place in spite of a falling-off in the total tonnage of the ships entering and leaving the ports of the Province. The

number of vessels actually increased, owing to a large rise in the numbers of small sailing craft engaged in the coasting trade. But the number of steamers continued to decline. Among these steamers the British flag was less in evidence than in the previous year, while the proportion of Japanese ships increased considerably, and that of Dutch ships strikingly. The noteworthy features of the year were a fall in exportations to the United Kingdom, increased importation of manufactured articles from Japan, and of cotton goods from India.

Among imports into Rangoon cotton goods easily held pride of place. The outstanding feature in the year's increased importations was the extent to which goods of Indian manufacture, both piece-goods and yarn, replaced Lancashire goods. The general increase in the cost of living caused a heavy fall in importations of silk, more or less a luxury article. Yet it is clear that all classes did not feel the need to economize, as the value of motor cars and motor cycles imported was nearly double that of any previous year. As was to be expected, there was a marked fall in importation of ores and metals. On the other hand, importations of hardware rose, Japan's contribution increasing strikingly. Shortage in the United Kingdom was responsible for a decrease in importation of provisions and also in importation of sugar from Java. The quantity of alcoholic liquors imported was very much smaller than usual. But importations of salt, in consequence of a threatened shortage, were the largest on record.

The real improvement in trade lay chiefly in increased exportation to countries other than India. Among exports from Rangoon, rice was easily first in importance. In spite of abnormally high freights and shortage of tonnage, the quantity exported, nearly 2½ million tons, was greater than in the previous year and surprisingly little less than in the years immediately preceding the war. Over a million tons went to India. The United Kingdom, taking over 300,000 tons, more than ever before, was the next best customer. The Straits Settlements, Ceylon and the Dutch East Indies took most of the remainder. Difficulty in importing oil into India from America and the Dutch East Indies, and the need of petrol for the military authorities in India and Mesopotamia were the prime factors in causing an increase in exportations of mineral oils to 156 million gallons, a record figure. Owing to the demand for paraffin-wax for making munitions in the United Kingdom, America and Japan, there was a substantial increase in exportations of that commodity. There was an improvement in the teak trade, too, mainly owing to the demand in India. A strong demand in the United Kingdom led to increased exportation of groundnut, oil, white beans, and also of cotton. War requirements were responsible for a strong demand for the rapidly increasing output of rubber and wolfram, and exportations of both these commodities were easily the largest on record.

The construction of the Twante Canal for the improvement of communication between the Government of Rangoon and the rich rice-producing lands of the Irrawaddy delta, was sanctioned in 1911. It was opened for traffic at the end of January 1917, having been completed at a total cost of nearly 54 lakhs. The net revenue from toll rates is estimated to give a return of over 6 per cent. on the capital outlay.

The value of trans-frontier trade, R948 lakhs, was substantially greater than in the previous year. The main factor in the improvement was an increase in the material supplied to, and in the output of metals from, the Burma Mines Company's property in the Northern Shan States. Apart from this, the actual volume of trade diminished, though the rise in prices obscures the extent of the decline.

Finance.—6. A large increase in the total revenue, accompanied by practically no increase in the total expenditure, is the feature of note in the finances of the Province for the year. The gross receipts of revenue were R12,72 lakhs, some R130 lakhs more than in the previous year, while the gross expenditure rose by only half a lakh to R876 lakhs. The most noteworthy increases in revenue were under the heads Customs, Salt, Forests, Land Revenue, Excise and Stamps. In consequence of reduction of outlay on public works, both Imperial and Provincial expenditure fell, the former by R11 lakhs to R62 lakhs and the latter by R5 lakhs to R559 lakhs.

The war has had very little adverse effect on the ordinary income of municipalities. The ordinary income of the Rangoon Municipality increased,

as did the total income of the minor municipalities. The expenditure of the minor municipalities decreased owing to enforced economies.

Practically all the other funds of the Province were in a healthy condition during the year.

Crime.—7. The year witnessed no diminution of the continuous increase of crime which has been the most disquieting feature in the administration of the Province. The volume of crime taken cognizance of by the police exceeded all previous limits, and the number of cases dealt with by the criminal courts showed a like advance. Violent crimes increased, murders, dacoities and burglaries being all more numerous than in the previous year. But the most marked increase was in cases of theft, due to poor harvests and depression of trade in 1915-16. The problem presented by the increase of crime received particular attention during the year. Special investigations into the causes of crime were made. In recognition of the fact that the best method of coping with crime probably lies in the improvement of village administration and bringing the administration of justice more into touch with local opinion, the local Government had under consideration a scheme for the formation of benches of headmen to exercise magisterial and executive functions in groups of village tracts. The increase of crime is doubtless in part attributable to the police being hampered by additional duties entailed by the war, and the absence of a large proportion of the officers on military duty. In spite of these disadvantages, the success of the police in the detection of crime, viewing all classes of crime as a whole, was maintained at the same level as in recent years, though there was a falling off in success in dealing with the most serious classes of offence. The overcrowding of the jails, the corollary of the growth of crime, continued, and would have been worse than ever before, had not special measures been taken in order to its reduction. Over a thousand prisoners, who were deemed fit subjects for clemency, were released during the year. Schemes for further relief by employing convicts on public works were under consideration. The repeated exhortations of the local Government bore fruit in a reduction in the number of sentences of imprisonment in the courts, notably in short-term sentences. In consequence of a fall in the number of first offenders released on probation, and of a considerable proportion of the fines imposed remaining unrealized, the local Government again called the attention of magistrates to the necessity of releasing first offenders in all suitable cases, and also of not imposing excessive fines. In the hope of reducing crime by the moral uplifting of youthful offenders, an interesting experiment was started by the opening, in conjunction with the Salvation Army, of a home at Rangoon for young released prisoners.

Education.—8. There were several notable new departures in the administration of education during the year. In order to bring the control of education more into touch with local opinion, both official and non-official, a Divisional School Board was created for each Division of the Province. These Boards took over from the Education Department the control of vernacular education in their several areas. The Rangoon School Board was formed to fulfil the same function in Rangoon. A committee was appointed to deal with the question of female education in the Province and made recommendations, mainly in the direction of emphasizing the importance of teaching girls domestic economy and needlework. Another committee considered the best methods of inculcating the Imperial Idea and fostering patriotism within the Empire among the Burmese. The training course for teachers in the Normal Schools was revised during the year. Apart from these novel features, the expansion of education took place at the normal rate. Both the number of public schools and the number of scholars in attendance increased, the increase being shared by all classes of institution except lower primary schools. The numbers of pupils passing the various school examinations were in every case considerably higher than in the previous year, as were the numbers who passed the Calcutta University examinations for degrees. Expenditure on education, in a year when the war imposed the necessity of the strictest economy on all Government departments, was a lakh and a half of rupees more than in the previous year, and amounted to R67 lakhs. A most gratifying feature, in view of the needs of the Province for doctors, engineers and

scientific experts of all sorts, and the aptitude of the Burman for such professions, is the increasing interest taken in scientific and allied subjects. The Science classes at the two colleges are expanding and attracting many of the best students. The number of graduates in Science increased strikingly. The number of students at the Government Medical School was much greater than in the previous year, and the educational qualifications of the newcomers are improving. Sixteen students, of whom ten, including one lady, were Burmese passed the final qualifying examination, a number more than twice the average of the last five years. The number of students at the Government School of Engineering at Insein has reached the maximum possible with the present inadequate staff and equipment, and the re-constitution of the school on a larger scale is under consideration.

Literature.—9. There was no cessation in the great decline in the publication of books that has accompanied the war. Curiously enough, the reduction is most marked in the case of books on religious subjects, while books dealing with the war are conspicuous by their absence. The most significant feature in the literary output of the year is the large number of novels, depicting modern Burmese life, written in language very near to colloquial Burmese and modelled on the pattern of the modern English novel. Most of these novels are crude pieces of work. Much of the psychology is borrowed from the English models, and the influence of the cinema is easily traceable in the construction. And a satisfactory compromise between the old-fashioned literary language and the vastly different colloquial language has not yet been attained. But the quality of these works is improving rapidly.

CHAPTER X.—BIHAR AND ORISSA.

Lieutenant-Governor.

SIR E. A. GAIT, K.C.S.I., C.I.E.

Members of Council.

SIR E. V. LEVINGE, K.C.I.E., C.S.I.

MAHARAJA BAHADUR SIR RAMESHWARA SINGH, G.C.I.E. OF DARBHANGA.

SIR W. H. H. VINCENT, KT.

General conditions. (*a*) *Agricultural.*—1. The economic condition of the people remained good on the whole in each of the three parts of the province. The northern portion, Bihar, consists of a section of the Gangetic plain rising gradually from the Ganges to the Himalayan foothills on the north, and to the Chota Nagpur plateau on the south. North Bihar is a fertile and well-watered area intersected by rivers flowing from the Himalayas, while south of the Ganges the country is drier and crops are largely dependent on an elaborate system of artificial irrigation. The area is thickly populated, the average density of the population being over 800 to the square mile. The people are almost all agriculturists, living in closely packed villages and cultivating almost every acre of the land. Compared with the inhabitants of the other portions of the province they are prosperous and given to litigation and their economic position is remarkable for its stability.

The crops in this area were above the average. The early break of the rains ensured an abundant rice crop. Towards the end of the rains serious floods occurred. The rivers which issue from the Nepal hills rose and swept large areas in all the districts of North Bihar, while in September the abnormal floods on the Ganges did some damage in the districts which lie on that river. The effect of these floods on the crops was not serious. In many cases they destroyed the comparatively unimportant *Bhadai* crops, which were ripe at the time, but the retreat of the water left valuable deposits of silt, ensuring a splendid *rabi* crop. Much useful work was done by the local bodies of the Tirhut Division in conducting a drainage survey with the object of concerting scientific measures for dealing with these periodic floods.

Owing to the favourable character of the season the areas irrigated by canals were smaller than usual. There are two systems of canals in Bihar, the Tribeni Canal, of recent construction in Champaran, and the Sone system, which irrigates Shahabad and parts of Gaya and Patna. These canals take off from the upper courses of the Gandak and Sone rivers and distribute water for irrigation by means of distributaries and smaller village channels. The cultivators take leases for water either for one year or for seven years. The decrease in the irrigated area this year was due mainly to the fact that rain fell in time to enable the *rabi* crop to be sown and therefore no water was wanted for this crop which ordinarily requires little water after it has germinated. There was little change in the area irrigated for the rice crop, since cultivators require the water mainly when the crop is ripening and therefore cannot afford to run any risk of drought.

The condition of the people, especially those who are not cultivators and do not live on the produce of their fields, was improved by the general fall in the price of rice, which was caused partly by the excellence of the crop and partly by the reduction of exports on account of the war. Epidemic diseases were less severe than in previous years, though there were serious outbreaks both of plague and cholera. The work of preparing the record of agricultural rights and rents was practically completed during the year in Gaya, the last district in the programme of the Bihar Settlement which broke ground in Champaran more than twenty years ago, while the revisional operations,

commenced three years ago, continued in the districts of Champaran and Saran. According to the present policy of Government these records are prepared and revised at intervals of fifteen to twenty years. They aim at securing an exact and reliable record of the rights of all persons in land, the importance of which can hardly be exaggerated in a country where ordinary documentary evidence is seldom worth the paper on which it is written. It was found in Champaran that conditions had greatly changed since the writing of the previous record. The operations excited a good deal of friction between landlords and tenants, and the case work which followed the revision of the record was on an unprecedented scale. Serious differences arose in connection with the cultivation of indigo and the exaction of illegal demands in excess of the recorded rents. The strained relations between landlord and tenant came to a head in the spring of 1917, and led after the close of the year to the appointment of a committee to inquire into the agrarian conditions of the district. In Saran, on the other hand, the Settlement officers found that few changes had occurred; the old record was still a living force and the work proceeded with surprising speed and smoothness. South of Bihar lies the hilly plateau of Chota Nagpur, a sparsely populated area, largely covered with jungle and forest. With its semi-aboriginal population and the rapid development of its mineral resources it presents problems very different from those of Bihar. During the year there was a general scarcity of rainfall and the crops were poor, though it was only in the district of Singhbhum that the scarcity amounted to famine and relief operations on a considerable scale were necessary.

The policy of the Agricultural Department was reconsidered and it was decided to concentrate on the main crops of the area served by each farm and to draw the attention of the cultivators only to demonstration work and to results of approved value. The system of disseminating practical knowledge through the agency of trained agricultural labourers has been expanded with satisfactory results. The attendance at the Sabour College is still disappointing.

Further measures were taken for the protection of private forests in Chota Nagpur. An officer was placed on special duty to examine the private forests of Ranchi and Manbhum, and private owners are being encouraged to apply for the reservation of their forests under the Indian Forest Act. An inquiry was instituted into the causes of disafforestation in the Santal Parganas and Government are awaiting proposals for the better protection of the existing forests.

General Conditions. (*b*) *Industrial.*—2. The development of the mineral resources of Chota Nagpur has assumed special importance owing to the war. The large increase in the manufacture of aeroplanes has resulted in a great demand for mica, which is found chiefly in the northern part of the Hazaribagh district, though deposits also exist in the Orissa States and in the Gaya and Monghyr districts. More than half of the total output of mica in India comes from the Kodarma mines of Hazaribagh, and strenuous efforts are being made to increase the production. An officer was placed on special duty to superintend the disposal of the higher qualities of mica and was given power to control mica stocks. The eastern portion of Chota Nagpur is the centre of the coal mining industry and produced over ten million tons, or 65 per cent. of the total output of India. Not only are the railways and factories of India dependent on this source of supply, but the coal is also required for marine purposes at Bombay and Calcutta. The output of coal showed little change, a decrease in one area being compensated by an increase in another. Progress was made in grappling with the peculiar problems of the mining areas and in securing healthy condition of work for the mining population, though the year was marked by a serious outbreak of malaria and the progress of the important water-supply scheme which is now pending was disappointing. To cope with the administrative difficulties arising in the Jharia coal-field, which is difficult of access from the district headquarters, the Subdivisional Officer of Dhanbad was appointed Additional District Magistrate and given increased powers and a larger staff. In Singhbhum in the extreme south of the area, the year saw the further development of the important iron and steel industry which is centred

at Sakchi. The Tata Iron and Steel Works which were established there a few years ago have transformed a desolate jungle into a busy centre of industry of the Western type. Under war conditions this undertaking is practically the only source of supply for steel rails and girders in India. The Company have been given additional mining and prospecting licenses, and the land required for the expansion and control of the works is being acquired. The Cape Copper mines in the Rakha Hills show great promise, although their full working cannot yet be seriously undertaken for lack of the required machinery. The test extractions of ore have been entirely satisfactory. The rapid rise of these industries in the remote corner of a primitive district has given rise to administrative problems similar to those in the coal-fields.

Native States.—The Native States of the province lie, generally speaking in a mountainous tract of country on the south-west. Nine of these States are under Government management owing to the minority or incapacity of their Chiefs. The State of Rairakhol was released from management during the year, and the young Chief was formally invested by the Lieutenant-Governor at a Darbar held at Sámbalpur. The remaining States, fourteen in number, are ruled by their own Chiefs. They are under the general supervision of the Political Agent at Sambalpur. An important change was the placing of the States of Kharsawan and Seraikela under the supervision of the Political Agent. Formerly, they had been under the charge of the Deputy Commissioner of the neighbouring British district. The change has done much to raise the status of these two States. The Chiefs of nearly all the States took the keenest interest in the war, and showed their patriotism and loyalty by large monetary contributions as well as by public prayers and thanksgivings. The Mayurbhanj State contributed ₹27,000 for an aeroplane and ₹12,000 for a motor ambulance. The Chief of Dhenkanal presented a motor ambulance, and the Chief of Bamra contributed ₹19,500 for various war purposes. The Maharaja of Sonpur organised a fund for the purchase of two æroplanes to which most of the States contributed handsomely. The administration of most of the States showed continued progress. Though some of them are poor and lacking in resources, almost all did their best to raise the standard of their administration. Many of the States contain valuable mineral resources and European capital is being attracted to this field to an increasing degree.

Administration.—3. There is little change to record in the ordinary district administration. The most important feature of the year was the increasing difficulty in providing adequate staffs for district work under war conditions. This is a difficulty which will be felt to an increasing degree until normal conditions of recruitment are restored. An important event of the year was the amalgamation of the Excise and Salt Departments and the formation of a separate cadre which was recruited mainly from the Provincial Executive Service.

Police and crime.—4. The same difficulty was felt in the administration of the Police. Although work increased considerably owing to the dangers and anxieties attendant on a state of war, the work had to be faced by a staff in which nearly all junior officers were absent. One of the chief features of the year was the spread of revolutionary activity into the province from Bengal. Persistent attempts were made by the Bengal conspirators to establish branches of their organisation in Patna, Gaya and Bhagalpur, and to enlist recruits amongst Bihari students who had hitherto shown no leaning towards revolutionary crime. One of their recruits was convicted of sedition at Patna and a number of youths were arrested and interned under the provisions of the Defence of India Act. To cope with this work, a second post of Superintendent was sanctioned to strengthen the Criminal Investigation Department.

A feature of the year was the renewal of the agitation amongst the Hindus directed against the sacrifice of cows by the Muhammadans. Three serious riots occurred in the Patna Division, two of which were not suppressed without bloodshed; and there seems little doubt that the widespread agitation of the early nineties is being revived.

The year also saw the commencement of important reforms for the improvement of the conditions of the force. The sanction of the Secretary of State was received to the introduction of important schemes for improving the pay of the

lower ranks and for increasing the district armed reserves. Financial difficulties prevented the introduction of more than a small portion of the scheme, but the pay of over a thousand constables was raised by one rupee a month in districts where recruits are difficult to obtain. This reform has long been necessary owing to the fact that the pay of the police has not in the past kept pace with the general rise in the price of living, and that Bihar is a recruiting ground for the police of other provinces. It has in consequence become increasingly difficult to secure men of the requisite standard, and it is idle to expect that men entrusted with the powers of the police will refrain from abusing their position if they are not paid a fair living wage. The increase in the armed reserves is especially important in view of the fact that there is only one small cantonment in the province where troops are in garrison.

Public Works.—5. Progress was made in the construction of the new Trunk road which is to link Patna and Orissa. The Lieutenant-Governor opened the important bridge over the Baitarni river on the boundaries of Singhbhum, and detailed plans were made for the last section of the road, which is to join Patna and Gaya. When completed, this road will be an important factor in linking up the three portions of the province. At present, partly owing to the natural difficulties of the country, but chiefly because the province was for so long ruled from Calcutta, the main lines of railway and road run east and west across the natural axis of the province. Considerable progress was made with the building of the new capital at Patna. Government House and the Secretariat were completed and a number of residences commenced, though the rate of progress was affected by the difficulties caused by the war.

Education.—6. In the sphere of education the backward condition of the people was one of the most difficult problems which faced the new Government when the province was constituted. The great extension of education in the Bengal districts and especially in Calcutta, had for years swallowed up a disproportionate amount of the available funds, and the interests of Bihar had suffered to a corresponding degree. The first care of the Local Government was to create a University of their own. After elaborate enquiries a scheme was drawn up which would have given the province a University of a residential type, greatly superior to any which had hitherto been established in India. The outbreak of war has indefinitely postponed the realization of this ideal, and it has been necessary to rest content meanwhile with an institution which is mainly of the examining and affiliating type. The necessary legislation was passed in the Imperial Council and the University has recently been inaugurated. Though for many years its work must be circumscribed, arrangements have been made for developing it into the type which was originally proposed. A site has been acquired to the west of the new capital and University buildings will be erected, where all post-graduate studies and most of the Honours courses will be concentrated. It is hoped that it will be possible gradually to extend these buildings so as to include several large residential colleges where the undergraduates will have the benefit of a true University atmosphere. The progress of collegiate and secondary education was hampered by the weakness of the superior staff as well as by financial stringency. Out of the small cadre of the Indian Educational Service no less than six officers were on deputation to war duty, and the execution of the schemes which had been matured for the improvement of secondary education was held up for want of funds. Such funds as were available were devoted mainly to the construction of school buildings and hostels, the provision of playgrounds and the improvement of equipment. In the field of primary education there was a general increase in the number of pupils. The increase was not great, but much attention was paid to the improvement of the teaching given in primary schools and the bettering of the conditions of the teaching profession. The local Government have preferred to make sure that the foundations of their educational system are sound, and that the existing pupils are well taught, rather than to press for mere numerical expansion of schools and pupils. One of the greatest blots on the system of primary education in the past has been the great proportion of boys who failed to acquire a permanent knowledge of reading and writing. It is hoped that now that the system

of teaching has been thoroughly overhauled, future expansion will represent a real advance in education and will not merely indicate that an increasing number of boys have passed through the educational mill.

Local Self-Government.—7. There is not much to be chronicled in the sphere of Local Self-Government. Municipalities are still largely controlled by legal practitioners. The legal element predominates also in the elected portion of the district boards, and these bodies are very far at present from being representative of the varied local interests committed to their charge. Nor can it be hoped that the personnel of the local bodies will improve as long as the higher classes consider it beneath their dignity to canvas for votes. In spite, however, of this lack of public interest, much useful and practical work was accomplished by the district boards and by several of the municipalities, as most of them include, besides an official element, a sprinkling of public-spirited non-officials who take on their shoulders the burden of administration. In the rural areas the progress of forming village unions for dealing with the local problems of sanitation continues to be very slow owing to the reluctance of the peasant classes to submit voluntarily to taxation for the improvement of their home sorroundings, a reluctance which is largely due to their poverty.

The larger schemes of drainage and water-supply in which local bodies receive expert assistance from the Sanitation Department and subsidies from Government have been necessarily postponed until funds become available and the price of materials ceases to be prohibitive. But it is to be noted as a hopeful sign that the calls upon the services of the sanitary officers of Government have become more numerous and insistent and have necessitated constant increases in the practical staff.

Medicine.—8. The growing appreciation of Western medicine is noticeable everywhere in the statistics of attendance both of indoor and outdoor patients at the charitable dispensaries. Most district boards have now set before themselves a definite programme for increasing the number of their dispensaries, and at the same time private practitioners are becoming more numerous and enterprising, and Government service is by no means the only career open to successful medical students. The province has now established a Board of Medical Examiners and has adopted a Medical Act to control the registration of qualified practitioners and penalise practitioners who represent themselves as possessed of qualifications which they have not got.

Miscellaneous Revenue.—9. Of the expanding sources of provincial revenue, the two principal are Stamps and Excise. The growth of the former as indicating an increase in litigation is not an unmixed advantage. It may be ascribed to the establishment of the High Court at Patna which promises a cheaper and more prompt decision upon all civil questions than was obtainable when the court of appeal lay in Calcutta. The total excise revenue amounted to over 112 lakhs of rupees, being an increase of 2½ lakhs over the preceding year. How far the addition to excise revenue represents a higher taxation of excisable articles rather than an increase in the drinking habit will be demonstrable only when the system of private distillation of *mahua* spirit has been entirely superseded by the contract distillery system. The contract system is being rapidly extended and only in the wilder parts of the province, where it would be almost impossible to prevent illicit distillation upon a large scale, is the private manufacture of country liquor upon license still permitted. Local Advisory Committees were convened as before. These Committees now meet in December to advise Collectors on the Annual Settlement proposals and again in July to discuss general matters of policy concerning Excise.

An arrangement was made with the Central Provinces Administration to maintain a zone free of all classes of excise shops, two miles on either sides of the border, between British districts and Native States in that province, and British districts and Native States in Bihar and Orissa. A similar arrangement has been made with the Nepal Darbar, but certain details remain to be settled.

Fisheries.—10. The Department of Fisheries was organised as a separate department shortly after the close of the year, and the previous Deputy Director was appointed Director. The activities of the department were directed mainly to the investigation of the spawning habits of Indian carp in

rivers, the experimental culture of this fish in tanks, and the distribution of pure carp fry for which there is a continually increasing demand. Efforts were made to improve the economic condition of the fisher castes by the introduction of the co-operative principle, but they were not attended with much success.

Military Recruitment.—11. The aboriginal tracts of Chota Nagpur and the Santal Parganas proved a useful reservoir for the supply of recruits to the military labour corps of Mesopotamia and France. About six thousand Santals were recruited by military agency during the year for employment in the former area, and before the close of the year arrangements were in train which produced later a supply of seven thousand Santals, Mundas and Oraons for service in France. Combatant recruitment is confined to the two Bihar districts of Shahabad and Saran, and during the year a small number of men was enlisted in these areas. Towards its close the work of recruitment was placed on a much more highly-organised basis.

Co-operative Credit.—12. The co-operative movement continued to make steady progress, though attention was paid less to new extensions than to consolidation of the ground already gained. One new Central Bank and 221 agricultural societies were registered. The number of Agricultural Societies rose from 1,221 to 1,337, and their aggregate working capital from R20⅓ lakhs to R21⅔ lakhs; non-agricultural societies showed an increase of nearly 20 per cent. in numbers and of 40 per cent. in working capital.

The provincial Bank was of great assistance to the Central Banks and in spite of a general rise in the rate of interest in the open market was able to meet all their requirements at the same rates as before. The Central Banks themselves are progressing towards efficiency, and the Directors are reported to be acquiring an increased sense of responsibility. As an instance of the indirect benefits of the co-operative movement the Agricultural Department is making more and more use of Central Banks and primary societies for the distribution of seed and manure and for other kindred purposes.

Finance.—13. The development of various schemes has been hampered by the financial stringency. When the province was constituted, a fairly liberal balance was given to the local Government with which to start operations. To make the best use of its opportunities, Government decided not to spend in a hurry but to wait for the preparation of mature schemes on which the outlay could be made to the best advantage. On the outbreak of the war orders were received to restrict expenditure (except on certain buildings in the new Capital) to the limits of the annual revenue and to avoid any large commitments for recurring expenditure. As a result of these conditions the province has still to its credit a large balance which it cannot touch until the present financial stringency ceases, and what money has been available after the bare necessities of administration have been provided has perforce been used not upon schemes of general administrative improvement but almost entirely upon buildings and roads and similar items of non-recurring expenditure, which would in normal times have been provided out of the provincial balances, leaving the growing revenues available for recurring expenditure. The unfortunate result has been the stunting of the growth of the administration from its very beginnings and the disappointment of the expectation that this backward part of the old Bengal province would make immediate and rapid progress when placed under a separate Government.

The Press.—14. The press as a whole continued to show moderation and loyalty. Nine new papers were started and five ceased publication. The local Press shows little sign of development and the effect of the stimulus given by the creation of the province appears to have worn off.

CHAPTER XI.—CENTRAL PROVINCES.

Chief Commissioner:

SIR B. ROBERTSON, K.C.S.I., K.C.M.G., C.I.E.

The War.—1. It cannot be said that the Province was much affected by the war, which, as time has gone on, has to a large extent ceased to excite interest among the people at large, though every effort has been made to spread a knowledge of the events at the front by the distribution of weekly summaries of war news in English and the vernaculars. At the same time there has been steadily manifested a desire to support the Government, when special calls have been made, as, for instance, in connection with the War Loan at the close of the year and the appeals in aid of the various War Relief Funds. This has been particularly the case among the rural population, who have repeatedly displayed their gratitude for the peace and protection they enjoy by readily responding, according to their means, to such calls. In the Chhattishgarh Division, for instance, when the War Loan was started, the cultivators spontaneously said that it was their duty to help the Government in view of all that had been done for them in the great famines. The number of small contributors shows how strongly this idea has taken hold amongst the people.

The Central Provinces has never been a military Province, and, with the exception of a few old military families in Berar, has supplied no men to the Army for many years past. Efforts were made to attract more Peraris into the Mahratta Regiments which recruit them, but it was not till after the expiry of the year under report that the territorial system of recruitment was extended by the military authorities to the Province and that definite efforts were made to recruit new classes both for the combatant services and for labour corps. A ready response was made by the convicts in the jails to the call for volunteers for the Jail Labour Corps for Mesopotamia, for which over 500 men volunteered at once, while further parties have since been despatched.

The Province, being almost entirely agricultural, cannot help much in the provision of munitions of war. A ready response was made by the owners of factories to a request to lend their lathes for munition work. Heavy demands were made late in the year for grass and timber supplies for military purposes. Although this demand did not come in till after most of the grass had been cut, the officers of the Forest Department threw themselves with such energy into the work that they were able to supply over 18,000 tons of grass, for the pressing of which the proprietors of cotton presses freely placed their presses at the disposal of the Government at reasonable rates. The baling, pressing and despatch of this large quantity of fodder made heavy demands on the time of many officers on the district staffs throughout the hot weather, but the experience gained has been most useful in connection with the still larger demands which have been made by the Army during the current year.

Agriculture.—2. The monsoon of 1916 broke early in June, gave abundant rainfall throughout the Province, and lasted unusually late. Excessive rain in September and October caused considerable damage to the cotton, juar and til crops, but rice gave a good outturn. The season was favourable to the rabi crops both in the Central Provinces and in Berar, and the rabi harvest was normal or slightly better than normal, although untimely rains after the crops were cut unfortunately did appreciable damage, especially to wheat on the threshing floors. The condition of the agricultural and labouring classes was good and the year was generally one of moderate prosperity. Prices, though higher than in the previous year, did not press with any severity on the working classes who found ample employment on good wages throughout the year.

The Department of Agriculture, though hampered by the depletion of its staff of experts, continued to do good work in research, experiment and demonstration. The success achieved in developing *roseum* cotton has, it is calculated, already put an additional annual profit of over a crore of rupees into the pockets of the cotton cultivators of the Province. An experimental Farm

was started at Chandkhuri, near Raipur, to test the possibility of growing long staple cotton under irrigation on the upland soil locally known as *bhatu*, with most encouraging results. The Department also distributed to cultivators in the Northern districts seed of the new hardy wheat known as Pusa 88 sufficient to sow 200,000 acres, to the great pecuniary benefit of the cultivators. The growth of improved varieties of sugarcane and of groundnuts is becoming increasingly popular. Generally speaking, it may be said that the people are beginning to take a real interest in the teachings of the Department.

Co-operative Credit.—3. Co-operative Credit Societies made great progress, the total number of societies having risen from 2,685 to 3,627, and the capital of all societies having increased from Rs. 87,09,187 to Rs. 1,27,33,924. The Provincial and Central Banks are in a sound financial position and the outlook for the development and progress of co-operative credit is distinctly encouraging.

Trade and Industry.—4. Trade was active during the year under report, the net balance in favour of the Province being over nine crores of rupees or six million pounds sterling. The cotton mills had a very successful year owing to the rise in the price of imported piece-goods, but their prosperity has not resulted in the establishment of any new mills, as under war conditions it is impossible to obtain the requisite machinery. The development of the Central Provinces collieries has made some progress, and the manganese industry has recovered under the stimulus of the demand for munition purposes. The coal deposits in the Korea Feudatory State were under examination by the experts of Messrs. Tata & Co., and the quality of the coal is well reported on. The firm is arranging to take out a mining lease, but nothing can be done until a railway has been built to the field. Sanction has been given to the survey of a branch line from Venkatanagar on the Katni-Bilaspur Branch of the Bengal-Nagpur Railway, but field work on the survey has had to be postponed for lack of engineering staff.

Irrigation.—5. The year under report saw the first development of irrigation from the Mahanadi Canal system. Thanks to the co-operation of the Revenue and Irrigation authorities, an area of over 70,000 acres was irrigated from this source, and in view of the security provided by irrigation the people were encouraged to substitute transplantation of rice for the wasteful broad-cast method of sowing, hitherto practised in Chhattisgarh. It is calculated that a net profit of about Rs. 10 per acre is secured to the cultivators by this change, which had been introduced during the year under report over an area of 40,000 acres. An unfortunate set-back was given to the Wainganga irrigation scheme by the breach of a portion of a new dam on the Wainganga River in the heavy floods of September 1916. This breach has since been repaired, and it should be possible to make a start with irrigation under the system next season. The total area placed under irrigation from Government irrigation works rose from 52,000 to 135,000 acres.

Local Self-Government.—6. There is little to remark under this head Bills for the amendment of the Local Self-Government Act and the Municipal Act were under consideration in the provincial Legislative Council, both being designed to afford greater scope for the activities of local bodies and greater freedom from official control. A resolution proposing the establishment of village panchayats for the management of local village affairs was adopted in the Council and accepted. A notable feature has been the formation of Rate-payers' Associations in several places, which, if properly developed, should result in increasing that popular interest in and supervision over the operations of local bodies which is so necessary as a corollary to the relaxation of official control.

Education.—7. The total expenditure on education rose to 49 lakhs, of which the share borne by Provincial Revenues was over 31 lakhs. The Administration has endeavoured as far as possible to supply funds for educational development, even at the expense of other branches of administration. The most important features of the year were the submission to the Government of India of a scheme for the establishment of a Provincial

University and of a new Government College at Amraoti, the completion and occupation of new buildings for the Government College at Jubbulpore, the establishment of a Government High School for girls at Amraoti, and the adoption of a new and comprehensive scheme for the training of teachers. Concurrently the policy of raising the pay of vernacular school masters and of increasing the number of schools has been steadily pursued, and it is satisfactory to record that the District Boards of Berar have voluntarily agreed to increase the local rates on land in order to provide themselves with increased funds for educational purposes. A special education rate has at the same time been imposed on persons deriving income from sources other than agricultural.

Public health.—8. The year was an unhealthy one. There was a heavy death roll from cholera, plague and malaria, all of which were unusually prevalent, the unhealthy conditions caused by the long continuance of the wet season leading to a great deal of sickness from the last disease. The death-rate was 39·95 per 1,000 while the birth-rate was 43·85, the lowest on record for the last 16 years.

Public peace and order.—9. The year was marked by outbreaks of hostility between the Hindu and Muhammadan communities in several parts of the Province. At Burhanpur a series of riots occurred in August 1916 and punitive police had to be imposed on the town. Similar ill-feeling arose in Jubbulpore, but was kept within bounds by the careful handling of the local officers. In the Yeotmal District of Berar there was an ebullition of bad feeling between Hindus and Muhammadans at the Moharrum, which resulted in some disturbance of the peace. This rupture of the *entente* between the two communities, who had been living in amity for several years past, is most regrettable. It is worth remarking that those who are recognised as popular leaders were unable and failed to effect any reconciliation in these cases in spite of the encouragement given them by the local officials.

The favourable agricultural conditions of the year were reflected in a general decrease in crime which was 11 per cent. below that of the previous year.

Politics.—10. There was much political agitation during the year, mostly engineered from outside, with the object of spreading the cult of Home Rule and establishing branches of the Home Rule League in the Province. The Administration has no desire to interfere in any way with legitimate and properly conducted agitation for political reform in India, but it could not contemplate without anxiety, especially when the country is at war, a campaign conducted too often on the lines of exciting ill-will towards the Government. Accordingly, when it was brought to the Chief Commissioner's notice that Mrs. Besant intended to attend a Provincial Conference at Amraoti and to deliver lectures on political subjects, he thought it advisable to issue an order under the Defence of India Act forbidding her to enter the Province, as, judging by her speeches and writings, he believed that her visit would have an unsettling effect on the people of the Province and be prejudicial to the public safety.

CHAPTER XII.—ASSAM.

Chief Commissioner.

SIR ARCHDALE EARLE, K.C.S.I., K.C.I.E.

General conditions. The War.—1. The year, except for the occurrence of disastrous floods in certain areas, was uneventful. The high prices prevailing in many of the district bazars caused some disquietude and after the close of the year were responsible for disturbances in the district of Goalpara. Apart from such incidents, the attitude of the general populace was marked by patience and sobriety, and outwardly at any rate there was little indication that the inhabitants of the province were affected adversely by the abnormal conditions of the time. The continuance of the policy of rigid economy in the administration, and postponement of all schemes and projects with the exception of those which were imperative and unavoidable facilitated the release of a large number of Government servants for military duties. Up to September 1917, 129 officials and 217 non-officials had joined either the Indian Army Reserve of Officers or the regular army, while 3,028 officers and men of the Assam Military Police (now designated the Assam Rifles) and of the Civil Police had gone on service. A labour corps, 2,000 strong, for service in France was raised in Manipur and in each of the districts of the Naga Hills, the Lushai Hills, and the Khasi and Jaintia Hills, and a large number of Garos were recruited for a combined Garo-Sylhetti corps. Owing to a change of policy the last mentioned corps was not completed, but after the close of the year, one company, 500 strong, of Garos and Nepalis went to France, and the Sylhettis contributed three sections of a labour corps for Mesopotamia. A ready response was forthcoming from the province as a whole to the calls which were made upon it for subscriptions to the various war funds. Mr. R. Henderson, C.I.E., contributed a sum of R31,000 for the purchase of an aeroplane, and His Highness the Raja of Manipur was distinguished by the assistance which he afforded in raising the Manipuri Labour Corps and in the readiness with which he complied with every suggestion for the provision of help in men and money from the resources of his State.

Frontier Tribes.—2. No operations of importance were undertaken beyond the frontier. The Akas showed more signs of improvement than any other of the hill tribes. They have made good use of English vegetable seed and potatoes supplied to them, have built stone bridges on the mule track from their chief village to the plains, and have sent some of their young men to the Political Officer's headquarters to learn to read and write. There were two petty raids by the Eastern Daflas.

The floods.—3. Extraordinarily heavy rain in the Assam hills in the beginning of October caused floods of unprecedented severity in Cachar and Sylhet in the Surma Valley and in a restricted area of Nowgong in the Assam Valley. Fortunately there was little loss of life and the destruction of cattle was less than might have been expected; but the crops, including the important winter rice crop, were almost completely destroyed in the affected areas. In the Surma Valley the position was aggravated by the fact that the people had not yet recovered from the effect of somewhat similar visitations in 1913 and 1915. Relief measures on an extensive scale were promptly undertaken. Between fourteen and fifteen lakhs of rupees were distributed in the form of agricultural loans with a view to enabling the cultivators to carry on till the next harvest was secured. Whilst some R80,000 were paid in affording gratuitous relief to the destitute. Suspensions of revenue were granted freely, and test works were started in the cold weather in the Karimganj and North Sylhet sub-divisions, where the damage had been most serious and the people wanted employment, funds for this purpose being placed by Government at the disposal of the local boards. Relief committees were formed, and excellent work was done by them. Special efforts were made by the Agricultural Department to encourage the sowing of dry weather crops in the affected parts, but the cold weather was unfavourable for these crops owing to the want of seasonable rain, and in the result little advantage

was reaped from these measures. In Sylhet and Cachar unusually large numbers of people sought and obtained employment on tea gardens, while in Sylhet the success of the relief works seemed to show that successive calamities had undermined the reluctance of the cultivators to do earthwork for a wage. By the end of the year, however, encouraging signs of recovery were visible, and one good crop of winter rice will set matters right. Severe outbreaks of cattle-disease in Kamrup, and Sibsagar and the effects of the previous year's floods in the latter district, adversely affected the prosperity of the cultivating classes. Elsewhere the condition of the people was uniformly prosperous.

Weather and Crops.—4. The agricultural conditions of the year were on the whole favourable and the rainfall not markedly abnormal, except in October. The outturn of rice, the staple food of the province, was below the normal, but was an improvement on that of the previous year. The jute crop was satisfactory, and the yield of other crops of importance, such as sugarcane, mustard, and *matikalai*, was fair. In the Agricultural Department the most important experiment in progress was the growing of sugarcane and the manufacture of *gur* on a commercial scale at the Kamrup Farm, where some 500 acres were under cane. A magnificent crop was secured, but it was found impossible to convert it all into *gur*, and arrangements have been made to manufacture white sugar from it.

Co-operative Societies.—5. The number of co-operative societies increased from 315 to 344, the number of members from 18,232 to 19,700, and the working capital from ₹8,98,537 to ₹10,61,108. The financial stringency rendered it impossible to provide funds for the sanctioned appointment of a Registrar of Co-operative Societies and Director of Industries, or for an increase of the supervising staff. Any considerable expansion of the co-operative movement was therefore not to be expected, and the abnormal conditions prevailing in the Surma Valley in consequence of the disastrous floods would in any case have been unfavourable to the multiplication of societies on sound lines. Some progress was, however, made in the formation of societies for purposes other than the provision of credit. A society for the supply of weaving materials was registered at North Gauhati, and four new weavers' societies were formed in Sylhet. The Government weaving master was appointed an organiser and supervisor of societies of this kind. Assam offers a wide field in this direction for the application of the co-operative principle.

Forests.—6. The area of forest in the province at the end of the year was 22,072 square miles, of which 4,911 square miles were reserved. War conditions continued severely to hamper forest operations, but the financial results showed a great improvement, the gross revenue rising from ₹9,93,000 to ₹11,57,000, and the surplus from ₹2,66,000 to ₹4,77,000. The improvement was due to the curtailment of expenditure as well as to the increase in receipts from both major and minor forest produce.

Excise.—7. The total excise revenue increased by 2·4 per cent., the increase being due to the favourable settlement of the vend shops. Consumption was practically stationary in the case of country spirit and opium, and declined appreciably in the case of *ganja*. The depressing influence of the war on trade, the distress caused by the disastrous floods in certain localities, the various restrictive measures introduced of recent years, and the high retail prices necessitated by enhanced vend fees, all combined to prevent the normal expansion of consumption. Stringent measures were taken to check the spread of the opium habit in the Naga Hills, and the policy was continued in the Khasi and Jaintia Hills of steadily reducing the number of stills and enhancing the still fees.

Trade.—8. The principal imports into Assam were manufactured cotton, grain, pulse, iron and steel; and the principal exports tea (the value of which represented 71·4 per cent. of the total value of exports), jute, unhusked rice, hides and timber. Imports increased in quantity from 10,301,848 maunds to 10,457,233 maunds, but declined in value from 982 to 943 lakhs of rupees. Exports fell in quantity from 10,694,093 to 10,041,373 maunds, and in value from 1,601 lakhs to 1,198 lakhs. There was an expansion of the

import trade in rice, salt, machinery and mill work, but imports of apparel, foreign piece-goods, grain, pulse, kerosine oil, mustard oil, betel-nuts, sugar, unmanufactured tobacco, and manufactured wood showed a falling-off. The export trade in jute, mustard seed, hides and raw silks expanded, while that in tea, rice in the husk, and raw cotton declined.

The total value of frontier trade fell from R22,80,387 to R20,28,738. The decrease which occurred both in imports and exports is attributable mainly to the contraction of trade with Bhutan owing to an outbreak of cholera at Darranga in Kamrup, the high prices of articles of export and the export of hill produce direct to Calcutta by the Bhutan Agent.

Tea.—9. The number of tea gardens increased from 781 to 786 and the acreage under tea from 382,824 to 389,172 acres. The weather was generally unfavourable in the Surma Valley and in parts of the Assam Valley, and the outturn of manufactured tea, which amounted to 242 million pounds, represented a decrease of 1·3 per cent. on the previous year's crop. Shortage of freight and the consequent impossibility of getting rid of stocks of manufactured tea were becoming a serious problem by the end of the year. Prices, however, remained high, and the industry was, on the whole, prosperous. That its prospects for the future are believed to be good is shown by the continued opening of new gardens. The investment of Indian capital in tea is reported to be increasing in Sylhet and a large number of applications from Indians for land for tea is reported from Lakhimpur. There was a considerable falling off in the recruitment of labourers for the tea gardens from other parts of India. Good crops in the recruiting districts, the increased demand for labour in those districts by industries connected with the war, the unusually heavy importations of the previous year, and the curtailment of expenditure owing to the difficulty of disposing of the crop, were all factors which contributed to this result.

Mines.—10. Coal was worked at Margherita in the Lakhimpur district and at Barjan in the Naga Hills, and oil at Digboi in Lakhimpur. Mineral oil was also for the first time obtained in considerable quantities at the Burma Oil Company's wells near Badarpur in Sylhet. Corundum was extracted in the Nongstoin State in the Khasi Hills for the manufacture of munitions. To judge from the number of applications for prospecting licenses filed and from the keenness displayed, the Cachar and Sylhet districts contain very valuable oil deposits.

Crime.—11. There was a general increase in cognizable crime in almost all districts of the province during 1916. The increase was most marked in burglary and theft cases, and is attributable chiefly to the scarcity consequent on the serious floods of the last two years and in part to the arrival of certain criminal tribes in the Assam Valley. Assam was fortunately free during the year from political crime.

Military Police.—12. The sanctioned strength of each of the four battalions of Military Police has been temporarily raised to 1,000 rifles with a view to facilitating drafts of volunteers to the regular army for war service. The total number of officers and men thus supplied during 1916 was 1,294. The number of recruits enrolled was 2,493 as against 1,597 in the previous year, 261 being Assamese and the remainder Gurkhas. No military operations were undertaken during the year, and the main energies of the force continued to be concentrated on the raising and training of the drafts for war service. The number of men required for the purpose was obtained without difficulty, and thanks to the unstinted efforts of the British and Indian officers of the corps, it was found possible to give more continuous and advanced training.

Public health.—13. From the vital statistics for 1916 it does not appear that the health of the province was seriously affected by the disastrous floods of October. There were cholera epidemics of some severity in Goalpara, Darrang, Nowgong, and North Lakhimpur, but on the whole the mortality from this disease was below the average. There was no change in the general death-rate from small-pox, but the increased efficiency with which the provisions of the Vaccination Act are administered produced a substantial reduction in the prevalence of this disease in urban areas. Fever was rather more severe than

usual in all districts. The mortality from *kala-azar* varied little from that of the preceding two years, but the tendency which this disease is showing to spread in the upper districts of the Assam Valley, which have hitherto been free from it, is a source of considerable anxiety.

In jails the death-rate *per mille*, which was reduced from 43·53 in 1914 to 21·49 in 1915, again fell to 18·51 in 1916, the last figure being the lowest ever recorded for the province.

Medical.—14. The number of hospitals and dispensaries in the province rose during the year from 205 to 215, of which 124 were supported by local bodies, 18 by private persons, and 73 by the State. Owing to the transfer of medical officers to military service and the difficulty of securing qualified substitutes, the total number of institutions at work is still less by ten than it was at the commencement of 1914. A Pasteur Institute and School of Research was opened at Shillong in January 1917 and has made a most promising start. The Assam Medical Bill, the object of which is to protect the medical profession and the public from imperfectly trained and irregularly qualified practitioners, was presented to Council in March 1916, and passed into law in May 1916.

Education.—15. Educational institutions suffered from the financial stringency and, in the Surma Valley, from the effects of floods and scarcity but on the whole steady progress was maintained.

In respect of collegiate education the aim of the local Administration has been to render Assam, so far as is possible, independent and to reduce to the minimum the exodus of Assam youths to Calcutta and other educational centres outside the province. The proposal to raise the Murarichand College, Sylhet, to the degree standard materialised during the year, the financial difficulties being overcome with the assistance of a number of the leading gentlemen of the Surma Valley, who offered to bear half the cost of the measure for two years. The Cotton College, Gauhati, which has since 1914 had a wide range of affiliation to the B.A. honours standard, for the first time sent up candidates for the M.A. degree during the year. The enrolment at the two colleges at the close of the year was 688, representing an increase of 95 in the course of the year. The Earle Law College, Gauhati, increased its enrolment from 35 to 45. All three colleges showed a satisfactory record of success at the public examinations.

The policy of the local Administration contemplates the maintenance of a Government high school at the headquarters of each subdivision, the expansion of each Government high school up to a limit of two sections in each class, and the encouragement and assistance of aided high schools, where a clear demand for these exists, with a view to their maintaining a reasonable standard of efficiency. This programme was necessarily interfered with during the year by financial considerations, but one additional institution was taken on to the aided list and new sections were added to existing Government schools, up to the limit laid down, wherever necessary. Three unaided middle English schools also advanced to the high school standard. Vernacular education has been made free to its highest stage, with the result that middle vernacular schools, which a few years ago appeared to be almost moribund, have taken a new lease of life. During 1916-17 schools of this class increased in number from 91 to 112 with a corresponding advance in enrolment. Primary schools received a temporary set-back in enrolment owing to the condition of scarcity prevailing in the Surma Valley.

Female education made little advance during the year.

Local Self-Government.—16. There was no change in the constitution of the nineteen local boards. Government grants amounting to ₹1,21,000 were placed at the disposal of local boards to finance the second year's work on the sanctioned five-year programmes for the improvement of rural water-supply. Otherwise, financial assistance had of necessity to be limited to amounts to which the Government was committed before the commencement of the war, and boards were consequently compelled to economise to some extent. The situation caused by the floods in the Surma Valley was cheerfully faced by the boards, whose co-operation in carrying out relief works financed by Government materially assisted the officers of the district administration in dealing with distress

A number of village authorities were constituted under the Assam Local Self-Government Act in the jurisdiction of the Gauhati and Jorhat Local Boards, and, particularly in the Gauhati sub-division, made good progress. Much interest was shown in the construction and repair of village paths, the sinking and cleaning of tanks and wells, and the maintenance of primary school buildings. The results were substantial in themselves and are an earnest of the progress which can be expected of these bodies under wise and sympathetic guidance.

The election of Commissioners was introduced in the place of nomination in four municipalities during the year.

Municipal water-works were under construction at Silchar, Tezpur, and Sylhet, those at the two former towns being completed and opened soon after the close of the year. The need for the improvement of conservancy arrangements is now more generally appreciated and some substantial progress in this direction was effected during the year.

CHAPTER XIII.—NORTH-WEST FRONTIER PROVINCE.

Chief Commissioner.

LIEUTENANT-COLONEL SIR G. O. ROOS-KEPPEL, G.C.I.E., K.C.S.I.

The commencement of the third year of the war found the North-West Frontier Province still enjoying comparative peace both internally and externally. As in the rest of India, the people were feeling the pinch of the rise in prices caused by the continuance of the war, but the agriculturists at any rate were compensated to some extent by the high rates their produce commanded, and many of the poorer classes were benefited by the upward tendency of wages. The rains on the whole were as satisfactory as in an average year and the sowing of the rain crops took place in favourable conditions. There were, no doubt, clouds on the political horizon. There was a certain amount of temporary discontent of a nature which affords a ready soil for agitation, due to zemindars and grain merchants holding up cereal stores in the hope that a scarcity of grain might send up prices. Thanks, however, greatly to the excellent work, both preventive and detective, of the police force in all its branches, but still more to the general contentment of the people with the existing *régime*, "political unrest" of any kind was practically non-existent. Naturally in the circumstances of a frontier province, almost entirely Mussalman by religion, there was bound to be a certain amount of latent sympathy with the Turks. Such feelings, however, never found vent in any public utterance, and very little use had to be made of any of the special War Ordinances. On the whole, the year witnessed a gradual decline of interest in the war, except so far as it affected the cost of living in the province, but at the same time there was, no doubt, a general desire for the victory of the Allies provided Turkey's *izzat* was not seriously affected. So far as political crime and unrest go the year under review may be looked back upon with satisfaction.

Crime and Police.—2. Excluding offences under Special and Local Laws and such unimportant cases as public nuisances, the increase in cognizable crime during the year was infinitesimal and the amount practically the same as the average for the past 5 years. Offences against property, such as robberies and burglaries, are the truest gauge of discontent among the mass of the population, and in both these classes of crime the year under review witnessed a decline, which is perhaps all the more remarkable when it is remembered that high prices prevailed throughout the year and that the portions of certain districts adjoining the border were disturbed to a considerable extent at times by numerous trans-border raiding gangs whose success might have acted as an incentive to malcontent cis-frontier bad characters. An ugly feature, however, in the criminal history of the province was the yet further increase in murders committed by cis-frontier residents. The record number of 353 murders was reached during the year, while attempts at murder were as many as 100. Some of these were, of course, committed by outlaws or trans-frontier men—a danger to which the inhabitants of a frontier province are always exposed,—and three of such cases alone accounted for 14 victims. A very common cause, too, of murders was disputes over land questions; but by far the largest number (one-third in the year under review) were committed in quarrels or disputes over women—a potent factor always at work among Pathan society and totally disconnected with economic or political conditions.

The increases of pay granted to the police in November 1915 naturally made their financial and administrative effects felt more in the year under review, during which the force was recruited practically up to its full strength as the result of the improved prospects. At the end of the year the Inspector-General of Police was able to describe the force as a contented one and up to strength, but it is in the future still more than now, when the force will consist of a high percentage of long service men, that Government will reap the full benefit of its generosity.

Frontier Militia and Constabulary.—3. The continued need for strict economy left—as was bound to be the case— its trail over the work of some of

the Departments, notably the "spending" ones. But there are some branches of the Administration in which economy would have been indeed false in the peculiar circumstances produced by the war, and in such it was wisely decided, with the consent of the Government of India where necessary, to incur increased expenditure. Thus the necessities of making service in the Frontier Militia more attractive had to be met by the grant of war batta to all the corps; and to relieve the regular army the Government of India had to face the cost of raising a new corps—the Mohmand Militia. Similarly the constant demands made upon the Frontier Constabulary for assistance in internal defence against trans-border raids and the future desirability of garrisoning with the Constabulary several of the outposts along the frontier, now held by regulars, necessitated an increase in the corps by eight companies of Infantry and two of Mounted Infantry. The results in both cases have proved the wisdom of Government's policy.

Provincial Judicial Service.—4. In the Provincial Civil Service, the standard of whose judicial work has long been a subject of unfavourable comment and a cause of dissatisfaction, a certain number of new appointments were created in the shape of Judicial Extra Assistant Commissionerships at the various district headquarters, to which duty allowances are attached, with the idea of making the judicial line more attractive, and improving thereby the standard and output of its work. With the same idea duty allowances were sanctioned for all the posts of District Judges held by Extra Assistant Commissioners. The scheme came into force, however, too late in the year to show any results.

Various other Departments.—5. The energies of the Forest Department were crippled to some extent by financial stringency, and all large roads and building projects had to be abandoned. There was a brisk demand for timber for army purposes which the department did its best to meet; the gross income benefited, as a result, by a rise of nearly 23 per cent. over the average of the previous quinquennium.

The Medical Department did good work in all its branches, considering the difficulties under which its establishment suffered.

The capabilities of the Jail Department, the satisfactory manning of which was made very difficult by war conditions, and the capacity of the jails were both taxed to their utmost by the excessively large number of prisoners with whom they had to deal, and in the circumstances it is a matter for congratulation that there was little trouble during the year either as regards discipline or health, with the exception of a somewhat disastrous epidemic of typhus in the Peshawar Jail.

The one branch of the Administration, whose activities it is most undesirable to cripple on economical grounds, is the Educational Department, but even so its building programme had to be limited. In other respects, however, it showed steady progress throughout the year; the decline in private primary schools was not an unmixed evil; secondary schools increased; there was a general improvement in the standard of teaching in the high schools; the number of girls' schools grew, and an important step was taken in the institution of a junior anglo-vernacular class for training teachers qualified to give instruction in English and Vernacular subjects in the middle classes of anglo-vernacular schools.

Local Self-Government.—6. There is little real progress to report in the realm of local self-government: the interest of members of both kinds of local bodies still require the stimulation and guidance of the official element; in some cases municipal meetings had to be adjourned for lack of a quorum; most of the district boards stand condemned by their Presidents' faint praise, though it is encouraging to note that in one district at least the board's interest in the maintenance of its roads has been stimulated by placing at its disposal funds for the purpose. No doubt the absence of Government grants owing to the war has crippled somewhat their powers, but in spite of this a greater attention to agricultural development at any rate might have been expected from the district boards.

Trade and Industry.—7. Trade generally continued to adjust itself successfully to the abnormal situation caused by the war with the notable exception of

that carried by the Malakand route, which was interfered with to an excessive degree by the unrest in tribal country beyond the border and by the blockade of Swat and Bajaur. It is interesting to note that the value of both export and import trade with Afghanistan increased. The province is not a manufacturing one, and there is nothing to note under this head, though it is encouraging to record that the general health and sanitary conditions in the only four factories which exist were very satisfactory.

Frontier affairs.—8. Except for persistent raiding in the Derajat by Mahsud gangs, all had been fairly quiet along the border up till about July or August 1916. At the opening of the year 1916-17 the Mohmands had recently tendered their submission and offered to pay a heavy fine, and prospects of a fairly long peace with them seemed favourable. The effervescence in Swat and Buner had subsided. The Mohmand and Bajaur Mullas, however, kept the fanatical pot simmering by incessant, though unsuccessful, efforts to destroy the settlement with the Mohmands. An uneasy feeling among the Afridis and other tribes was intensified towards the end of June by the activities of Mir Mast, *ex*-Jemadar of the 58th Rifles, a deserter from his regiment in France, who moved about Tirah registering, in the name of the Sultan, recruits for the Turkish Army, which, he said, was about to arrive. The arrival in Tirah a little later of two so-called Turks added fuel to the smouldering fire. They produced a flag which they claimed to have been blessed by the Khalifa, announced themselves as the Sultan's plenipotentiaries, and offered the Afridis his protection and assistance against the British. They made similar attempts to enlist the neighbouring tribes. Though their activities made it impossible for our Political Officers to relax their precautions for a moment, yet nowhere did they meet with any real success until August, when, working through the notorious Haji Sahib of Turangzai they began to affect the Mohmands by preaching and bribes. The Haji asked for and received assistance in the shape of armed men from the Colony of Hindustani Fanatics, set up a printing or lithographing press, from which he issued a series of rousing *jehad* leaflets, and by the middle of September had stirred up the Mohmands to presenting an ultimatum demanding the immediate restoration of their allowances. Receiving what they considered an unsatisfactory reply, the Halimzai, Tarakzai and the Pandiali sections of the tribe opened hostilities by firing on regular troops near Hafiz Kor and raiding on an extensive scale. They received some half-hearted assistance from some of the Bajauris. It became necessary to despatch the Peshawar Flying Column to Shabkadr and to place the offending sections under a thorough blockade. This took the novel form of a barbed wire fence, made more formidable by a live wire throughout its length of 17½ miles, from Michni to Abazai, and by blockhouses at intervals of about 800 yards. In spite of this, however, on November 14th the Haji Sahib and the Babra Mulla assembled a force of about 6,000 on the hills west of Shabkadr. It was decided that our troops should disperse them the following day. Accordingly, on the morning of the 15th the force at Shabkadr moved out against them ; one brigade was sent a short distance beyond the wire to draw out the Mohmands, the guns remaining behind the wire, and working in conjunction with the aeroplanes, shelling the tribesmen on the hills round. The *Lashkar* made a very half-hearted attack, and by the following day were rapidly dispersing, hastened on in this purpose by further attacks from our aeroplanes. After this the Mohmands gave little further trouble, but by the end of the year under review no actual settlement had been made with them, though the favourable prospects for such culminated in a final one shortly afterwards. After these events the winter on the border passed by quietly save for Mahsud raids. The Haji of Turangzai turned his attention to the Swatis, but the death of their famous Mulla, Sadullah Khan, in January 1917 left the extremist faction without a leader, and, far from responding to the Haji's excitations to *jehad*, the more important parties in Swat approached the Political Agent with proposals that Government should take over the valley. The behaviour of the Upper Swat tribes, indeed, continued so satisfactory that the blockade of the past 18 months was raised against them on March 10th, 1917.

As the year drew to an end the cloud on the Mahsud border, however, grew blacker. Though the tribe had harassed almost continuously the unfortunate Derajat border villages, they had until March 1917 avoided any direct

challenge to our regular troops or the Militia. On March 2nd, 1917, however, they made a strong demonstration against the Militia fort at Sarwakai. In an unfortunate sortie against them the Militia suffered somewhat heavily and nearly lost the fort. The latter held out, however, till relieved about a week later by a column from Tank. Exaggerated reports of the event greatly excited the Mahsuds, and to some extent their neighbours, and the former embarked upon an active campaign against our posts and communications in the Gomal, which necessitated the despatch of the Waziristan Field Force to the Mahsud border. These events, however, belong to the narrative of 1917-18.

Thus closed a somewhat anxious year, from the beginning to the end of which His Majesty the Amir's firm adherence to the policy of neutrality announced by him at the commencement of the war proved of the greatest value. Throughout the year the Frontier Militias and Constabulary were tried severely and stood the test well; their work deserves special mention in connection with the successes gained by them against raiders in Bannu and the Tochi Agency. On January 13th, 1917, a gang of seven desperate outlaws was exterminated in Bannu, and on March 20th of the same year a party of 17 was accounted for to a man in the same district. Both these events stand to the credit of the regular troops also, and it is interesting to note that in the latter affair the lessons learnt in the war in the West were turned to good account in the East in the shape of a very successful bombing attack on the gang by a party of the 52nd Sikhs when other tactics had failed. The development of the Air Service, which the war has likewise brought about, has not been without its value, both military and moral, on border politics.

CHAPTER XIV.—BALUCHISTAN.

Chief Commissioner.

LIEUTENANT-COLONEL SIR JOHN RAMSAY, K.C.I.E., C.S.I.

General.—1. In spite of the prolongation of the war, another year of peace and order has been added to the credit of the tribal system of Government under the direction of British district officers. By the commencement of the year excitement caused by the war had died down in the administered districts and the three areas which were causes of anxiety were the Persian border, the Shorawak border of Afghanistan, and the Jhalawan tribal area of Kalat. The absence of any vestige of Persian authority along the whole length of the Baluchistan border was no new thing, but it had become more serious owing to the appearance of German parties, who were willing to stir up trouble regardless of the probable ultimate consequences to their dupes. In the autumn of 1915 Bahram Khan of Bampur had very seriously, and with impunity, raided southern Makran and early in April 1916 Mr. Hughes and Lieutenant Horst were murdered on the border at Mand by fanatics from Persia. This outrage was no doubt partly due to Bahram Khan's success and partly due to German instigation. The loss of these two officers was a deplorable event, and in the case of Mr. Hughes who had made for himself a unique position amongst the Brahuis and local Baloch, it was a public calamity. Circumstances had not permitted of vigorous action being taken against Bahram Khan after his raid and as an alternative it had been decided to send a Mission across the border with a view to counteracting German intrigues and in the hope of maintaining the peace of the border. The Mission was to be in charge of Major Keyes and it was to be started off from Mand by Lieutenant-Colonel Dew, the Political Agent of Kalat, who had been able to induce Bahram Khan to come to the border for discussion. This Mission was within a forced march of Mand when news of the murders was received and the presence of responsible officers was sufficient to restore some confidence. The men of the Mekran Levy Corps had shot the murderers on the spot, but they were much upset by the disorders prevalent on the border, which had culminated in the murder of their only two British Officers. The proceedings of the Mission which operated across the border are beyond the scope of this report. It is therefore sufficient to say that it succeeded in keeping the border peaceful, was of great assistance in furthering a settlement with the Damani tribe, and returned to India from Charbar in April 1917.

On the northern portion of the Persian border conditions were perhaps even worse. The Damanis living in the tract known as Sarhad, across the border, had for years been the terror of the adjoining Persian districts though they had been wise enough not to attack British territory. They had enjoyed a long continued success as marauders and had no doubt been emboldened by the disturbed condition of the border and the impunity with which they had raided northern Makran in the winter of 1914 and Bahram Khan had raided southern Makran in the autumn of 1915. It only wanted the stimulus of German intrigue to incite them to further excesses against us. In April 1916 they crossed the British border in such force as they could muster; attacked military convoys and caravans on the Nushki-Robat road; looted levy thanas and Rest Houses; and, for a short time, closed the road. Military action against them was thus forced upon us. These operations are also outside the scope of this report. It is sufficient to say that the operations were very successful and concluded with a satisfactory settlement with the Damanis.

The trouble on the Shorawak border though less serious was much nearer home. For some time there had been a series of thefts of camels, which had caused great inconvenience to the Military authorities, and there had been other minor offences from across the border. In April the bad characters of Shorawak, with their chief supporter Malik Samand Khan, Mandozai Barech, obtained reinforcements from the Nushki district in the form of the Badini Sardar and a number of his followers. Further camel thefts and robberies continued to be committed from across the border until June 1916 when a very daring attempt was made to derail the train going to Nushki. The plan, which

had been most admirably conceived, was to stop or derail the mail train from Quetta to Nushki, which was supposed to be taking ₹70,000 to the Nushki Treasury. The plan only failed owing to the accident that the mail train was late, with the consequence that a train of empty camel trucks ran into the trap. The engine driver was shot, but the raiders got nothing. This was the climax, and since September 1916 the Barech have caused no trouble.

A recent examination of the history of Jhalawan has shown that on and off, the Sardars have been a cause of trouble for at least twenty years, but that they have never received a lesson. Things came to a head in the summer of 1915; but, for a variety of reasons, no satisfactory settlement was obtained, in spite of the fact that troops were sent to the border of their country. In the winter of 1915-1916 Lieutenant-Colonel Dew, on his way to Makran, gave the Jhalawan Sardars an opportunity of making a fresh start by bringing about a number of Jirgah decisions providing for the compensation of those injured in the disturbances of 1915. The decisions were accepted by the parties concerned, but it soon became apparent that the Sardars had no intention of carrying them out. The leading Sardars of the malcontents, that is to say the Mengal and Gurgnari Sardars, went secretly to Persia to join Bahram Khan. A little later it became clear that the compensation which had been awarded by the winter Jirgahs was not going to be paid, and later still, there were raids into Sind. The Jhalawan cup was now full and over-brimming. Lieutenant-Colonel Dew was sent to Jhalawan with a military escort of 6 British officers, 250 Indian officers and men of the 106th Hazara Pioneers, one section of Mountain Battery, one Jemadar and 29 rank and file of 3rd Gwalior Lancers and 118 Field Ambulance. His objects were to ensure the peace of the Sind border, to punish the guilty, and to show all waverers that Government was still strong. In addition to the troops he had material support from a few men of the Makran Levy Corps and from some tribal Sarawan levies; he also had the moral support of representatives of some of the Sarawan Sardars and of Syed Khan Bahadur Nawab Mir Shams Shah, the Wazir-i-Azam of the Kalat State. The latter support was particularly valuable as fanaticism had a good deal to do with the latest outbreak in Jhalawan. Complete success was obtained. Forty-seven outlaws were killed and 91 were arrested, and within two months peace was restored in Jhalawan.

Tribal Administration.—2. The conduct of the tribes in the administered area has been good and all Political Agents report that the Jirgahs have done good work in the settlement of local cases. The number of cases disposed of by Jirgahs during 1916 was 5,857 * compared with 5,708 in 1915. The Criminal cases show an increase of 184 while the Civil have dropped by 35. In the great majority of cases the Jirgah awards were accepted by the parties concerned. These figures show that Baluchistan shows no signs of outgrowing the system of tribal responsibility on which the administration is based and give some idea of the protection afforded by that system against expensive and long drawn out litigation. One of the chief problems of modern frontier administration has been to find a method of adapting the system of tribal responsibility to the conditions created by the arms traffic. A solution seems to have been found in the distribution of Government arms and in the creation of bodies of tribal Scouts. During the year more arms have been distributed and several new bodies of Scouts have been raised. Each body of Scouts consists of from 20 to 25 armed men, it is solely employed in the tribal area concerned, is responsible for its own intelligence work, moves about as it thinks fit, and is a real and easily accessible force for the protection of the tribal area. The tribesmen can always get information about bands, or even individual bad characters, visiting their tribal limits; but they could often urge with justice that they had not the force to engage them. This excuse has ceased to be valid since the creation of the Scouts, for the Scouts can always call to their help other men who have Government or private arms. The only area from which really formidable raiding gangs could be expected was Waziristan, and to deal with such bands the Scouts could usually rely on the assistance of the Zhob Militia. The Mahsuds were responsible to two serious raids into Zhob in August and September 1916 and for three crimes of less importance. More raids might well have been expected; that more were

* Civil 3,031.
Criminal 2,826.

not committed is probably due to the combination of a good intelligence system and the efficiency of the Militia.

Industries.—3. The existence of coal in Baluchistan has long been known and one mine at Khost is systematically worked by the North-Western Railway. The other mines are not worked by men possessed of capital and expert knowledge. The shortage of rolling stock and the extension of railways in Baluchistan has brought to notice the potential value of the Baluchistan coal fields and the question of working the coal on more satisfactory lines is being considered. The chromite deposits have been opened out by the making of a narrow gauge railway to the neighbourhood of the mines near Hindubagh from the North-Western Railway at Khanai. The first load of chrome ore was brought down by the railway towards the close of the year. The search for oil, which was very active before the war, is now less keen. The concession of the Burma Oil Company in the Las Bela State has been extended for a second year ; the Company's trial boring near Ormara had reached a depth of about 1,800 feet at the close of the year.

Public Works and Railways.—4. The expenditure on Civil Works from Special Revenues was R8,11,678 in 1916-17 against R7,33,375 in 1915-16. The principal works in progress or completed during the year were the rebuilding of the Kohlu Tahsil, the new Lady Dufferin Hospital at Quetta, the improvement of the water supplies at Nushki, Barkhan, Fort Sandeman, Quetta and Sibi. Much attention was paid to the improvement of the roads.

The grant for expenditure on " Irrigation Minor Works and Navigation " was R3,02,127. The training works of the Khushdil Khan Reservoir and the Spin Karez and Nari Weirs suffered considerably from floods.

The Nushki-Dalbandin extension (116 miles) and the Khanai-Hindubagh Railway (46 miles) were commenced in September 1916. Both these lines were working before the close of the year under review. The former line, though built chiefly for military purposes, will prove a great administrative convenience and give an impetus to trade with Persia.

Public Health.—5. The province has enjoyed immunity from every kind of epidemic disease except cholera, which appeared in Zhob in June 1916 when 35 villages were infected causing 328 cases and 174 deaths. Thanks to the timely and energetic efforts of the local medical and civil officers the disease was prevented from spreading still further. A party of Powindahs who passed through the district on their way from the Punjab to Afghanistan was responsible for introducing the disease into Zhob. Anti-malarial measures were adopted in several places with good results. During the year under report the number of malarial cases treated in the dispensaries of the province fell by 3·77 per cent. as compared with the number treated in the previous year. The vaccine operations among the Zarkun and Mari tribes show that the most ignorant and backward people of Baluchistan are now beginning to appreciate the advantages of vaccination.

Agriculture and Irrigation.—6. These subjects are particularly closely allied in Baluchistan, for no crops can be grown without artificial irrigation of some sort. In the Irrigation Department an important decision has been reached. For a number of years an Irrigation Officer has been largely employed in preparing reservoir schemes, but it has now been admitted by the experts that such schemes are not likely to be a success in Baluchistan. The chief difficulty is the enormous quantity of silt carried by the rivers when in flood. It has therefore been decided to turn our attention on possible methods of saving loss in channels and of using, as opposed to storing, flood water.

Grazing.—7. In the early part of the year there was great scarcity of grazing which caused heavy mortality among the flocks. The crops without permanent sources of irrigation failed, but the other crops were good and, owing to high prices, the Land Revenue of the year was R86,401 more than last year. In many parts of Baluchistan the revenue is taken in kind ; consequently Government gets its share of any rise in prices. The grazing conditions in the Mari and Bugti hills were especially bad. Each tribe received a loan of R20,000 and a free gift of R9,500. In the past it has been customary to make such free gifts in times of scarcity, and the custom was continued on this occasion because it was felt that conditions were such that it was not

desirable to have on the borders of Sind, the Punjab, and Baluchistan, a number of distressed Baluch of marauding instincts.

Native States.—8. His Highness the Khan of Kalat has enjoyed good health and has continued to give his moral and material support to Government. The State is well administered by His Highness and the Wazir-i-Azam, Khan Bahadur Nawab Mir Shams Shah. The Sardars of Sarawan have kept their tribes in order and presented ₹19,300 to be given to War Funds. As most of the State is held free of revenue by the various tribes its income is very small compared to its importance. Nevertheless, the State and the Sardars have put three and a half lakhs into the War Loan.

There were no disturbances in Las Bela. The State was able to put a lakh and a half into the War Loan and the Jam Sahib and his subjects gave ₹15,605 to War Funds. The free gifts given by the State during the war have been considerably over a lakh of rupees.

CHAPTER XV.—COORG.

Chief Commissioner.

MR. H. V. COBB, C.S.I., C.I.E.

Cultivation.—1. Since the grave decline in the prosperity of the coffee industry 20 years ago the Coorg ryot has turned more and more to the raising of wet crops which have become to an increasing extent his sole source of livelihood. The province was still suffering in the year under report from that unusually severe epidemic of rinderpest and the consequent shortage of cattle told heavily on the cultivators. To this extent the year was an unfavourable one, though the rice crop was decidedly better than in the previous year and the prices obtained were unusually high. To obviate these periodical epidemics of rinderpest, which last year exceeded all previous records, it will probably be necessary to attack the centres of infection in the Mysore State. Steps are being taken to increase the number of Veterinary Assistants, but the short period of immunity gained by inoculation and the fact that small doses of serum were found entirely useless has shaken the faith of the ryot in the accepted methods of prophylaxis.

For the European planter the past year has been one of constantly increasing anxiety for the future. Although the coffee crop was an average one, much difficulty was experienced in its disposal, and a considerable proportion of it still remains at ports on the West Coast awaiting shipment.

The prices realised were higher than might have been expected and, were it not for the shadow cast by the war, planters would have had no cause for anxiety. Those who were fortunate enough to have included pepper cultivation in their activities were rewarded by high prices and quick returns. Pepper is only grown as a by-product to coffee and that too only in South Coorg. Its cultivation will probably extend in the near future.

Although the market for pepper remained unaffected by the war, the cardamom market was altogether disorganised and what would have been in ordinary years an excellent crop remained almost unsaleable except at bed-rock prices, which left but little gain to the cultivator.

The Indian growers of oranges complained of the ravages of the boring beetle which has infested their gardens for some time past and which was unusually abundant during the monsoon.

Rubber-tapping was commenced on the two largest rubber concerns in the Province and results are said to be very promising.

In spite of the high prices, the imported coffee coolie and the indigenous labourer continued to thrive. These classes have not suffered to the same extent as the proprietors.

Public Health.—2. An index in the well-being of the labourer is to be found in the state of the public health, which was considerably better than has been noted for several years. The number of births was 9·68 above and the number of deaths 24·52 per cent. below the average for the previous five years.

Quinine prophylactic against malaria continued to be administered in the secondary schools with satisfactory results. 50,500 quinine powders were sold to the public through the agency of the post offices.

Forests.—3. The abnormal receipts from the sale of sandalwood resulted in a surplus on the working of the Forest Department of Rs. 3,27,817, thus swelling the provincial surplus to the quite unprecedented figure of Rs. 3,72,626.

Sylvicultural operations are being greatly extended in the case of sandal, teak, ironwood and rosewood, and efforts are being made to increase the fuel supply, especially round Mercara, where the rates are unduly high and existing plantations are receiving an increased share of attention. The expenditure on clearance of the *lantana* weed in the eastern forests, quite apart from the immunity from fire which has resulted, has been more than justified by a wonderful growth of teak and rosewood seedlings which now have a chance to develop.

Education.—4. Considerable progress was made in the sphere of education. Among other reforms introduced in the year under report may be mentioned the foundation of 13 new elementary schools, and improvements in the strength and pay of the teaching staffs. Instruction in temperance is being given as an experiment in the schools. The Coorgs have unfortunately a marked inclination towards intemperance, which they have inherited from the period of the coffee boom 20 years ago.

Other heads.—5. There is nothing of interest to report from this small province under other heads.

CHAPTER XVI.—DELHI.

Chief Commissioner.

W. M. HAILEY, C.S.I., C.I.E.

Weather and Crops.—1. The agricultural conditions of the year were far more favourable than in the year preceding. The monsoon rainfall was 3·71 inches above the normal, and though its actual incident was somewhat unfavourable to the outturn of the autumn crops, the monsoon allowed of the sowing of an unusually large area for the *rabi*. The area matured at *kharif* was 135,676 acres against 102,556 in 1915-16. In spite of some failure in the maturing of the *rabi* crops, owing to the shortage of winter rains, the harvested area of these crops was nevertheless 145,722 acres against 68,570 acres in the previous year.

Trade and Industry.—2. The course of trade was influenced by the depression following on the reduction of imports and the difficulties attending railway transport. Prices of all imported material were high, and there was much speculation of rather a wild nature in goods of this description; but the profits remained in the hands of a few dealers. Industrial conditions, though perhaps somewhat better than in the preceding year, were still far from favourable, and the poorer classes suffered from the continued high prices of foodstuffs.

Litigation and Crime.—3. The stagnation in really productive business showed itself in a reduction in the institutions of civil cases; but the unfavourable industrial conditions and the high range of food prices fortunately did not lead to any increase in crime. Indeed, the number of true cognizable police cases showed a reduction on previous years. Nor was the year marked either by any serious political excitement, or by the discovery of criminal conspiracies against the State.

Education.—4. The educational returns show no falling off in the progressive increase in the number of pupils attending primary and secondary schools which has marked the statistics of this province for the last four years. There was an increase in both public and private educational expenditure, and an addition of two to the number of secondary and nine to the number of primary schools.

Public Health.—5. Sanitary conditions, especially within the City and Civil Station, continued to show the improvement which has resulted from the attention paid in recent years to this side of administrative activity. The municipal report shows that the sanitary establishment was increased, a new slaughter-house constructed, and drains extended. The important and costly anti-malarial measures in the Bela were pushed on, and one section completed; in the Civil Station a brick channel was constructed to the Najafgarh Drain cut. Considerable additions were made to the City Western Extension, which should in time draw off a large number of menial occupations from the city. The heavy monsoon rains rendered the year less healthy than its predecessor, but the death rate (32·92 *per mille*) nevertheless compared very favourably with the years preceding 1914. The excess of births over deaths, though lower than in 1915-16, also reflected a far more satisfactory state of affairs than in 1914.

CHAPTER XVII.—THE ANDAMAN AND NICOBAR ISLANDS.

Chief Commissioner and Superintendent of Port Blair.

LIEUTENANT-COLONEL M. W. DOUGLAS, C.I.E.

Penal Administration.—1. The number of convicts in the Settlement at the close of the year was 12,843, representing an increase during the past five years of 1,615. The classes were as follows:—Male labouring convicts, 10,926; female labouring convicts, 280; self-supporting convicts, 1,637.

The gross cost of the administration amounted to R26,06,200, and the nett cost, deducting the value received from remunerative works, to R12,73,938. The cost of each convict amounted to R100-10-0 for the year.

Eighty-four convicts escaped into the forests, of whom 71 returned or were recaptured, in addition to seven of the previous year. During the past seven years 109 convicts have disappeared in this manner, who have almost all perished; a few were possibly killed by the hostile tribe of Jarawas, and a few perhaps attempted to cross in canoes to Burma. Instances of successful crossing have occurred, but are rare. More than 50 per cent. of the fugitives are Burmans.

The convicts in the Female Jail continued to weave all material, and to supply all cotton and woollen clothing and blankets for the Settlement; but an experiment in silkworms failed owing to the misfortune of a premature hatching of eggs when in postal transit. The factories in the Cellular Jail, which contains cells for 703 convicts, were responsible for a revenue of R99,596 mainly from cocoanut produce.

The Associated Jail, started in 1916 as an annexe to the Cellular Jail, is now kept fully occupied. In the latter jail are confined (1) newly arrived convicts of the habitual or dangerous classes for periods from six months to two years; (2) convicts locally convicted; (3) free residents locally convicted; (4) convicts whose release in the Settlement is undesirable. The Associated Jail is reserved for (1) the remainder of the newly arrived convicts for periods of six months, (2) the juveniles.

The private workshops, where work of all kinds in metal wood and tortoise-shell is produced, had greater demands than could be met; but though this institution is educationally valuable, it is impossible to spare more than 100 convicts for it.

The special nominal roll and labour record cards introduced experimentally in 1915-16 have met with success. By their means a record is kept of the labour performed by each convict during his term whether "hard," "ordinary" or "light," and favouritism, or oppression at the instance of convict petty officers is checked.

The allotment of certain villages for occupation in the main by married "self-supporter" convicts is proving popular; and the special village for such self-supporters who are not agriculturists continues to attract residents. The extension of the grant of self-supporter tickets to artificers and to convicts employed in Government offices has resulted in the issue of 132 tickets to men of these classes. Under the previous system about half of these convicts on the completion of ten years in transportation, would either have remained at labour or would have had to cultivate rice.

Military Police.—2. Practically the entire force volunteered for active service last year and of the men selected, one officer and twenty-six men, the former and two men have been reported as killed; and of the ten men who returned, two were wounded, six men were promoted, one to the rank of officer, while sepoy No. 2549 Khan Singh was awarded the Indian Order of Merit for great gallantry on the field.

Agriculture.—3. The year was climatically better than the last and the tea garden made a recovery, yielding a gross outturn of R223 and a nett outturn of R43 per acre. Prices are ruling high and the outlook for the coming year is still more promising. No further cocoanut extensions will be made

at present. The number of trees in bearing is 49,356, but when the extensions mature the total number will be about 200,000. The gross annual value of a cocoanut tree based on the outturn from the Jail factory is at present about R2, and at similar rates the plantations should hereafter yield four lakhs annually. The rubber plantations, which have been increased in area from 137 to 500 acres, are doing well, and as soon as an agricultural expert is appointed to the Settlement it will be possible to commence extraction of rubber. These plantations should eventually yield at least two lakhs annually. The vegetable gardens are now well organised and a systematic rotation of crops is maintained, with the result that the area cultivated has diminished, but the outturn has increased; and it is now possible to provide all labouring convicts with vegetables.

Public Health.—4. The record of the health of the year shows improvement as compared with that of 1915, but the incidence of sickness and mortality has still been high. Malaria of special virulence prevailed in 1914, which in addition to direct results rendered the population liable to other diseases, and the effects of this severe attack are doubtless still in operation. The main cause of sickness was as usual malaria; and of death, pneumonia, now recognised to be a direct result of malarial infection in the Settlement. Malaria not only affects the convict population, but persistently saps the vigour of the entire official staff, leaving after effects in its wake which are often permanent. A gang of close on 100 men is maintained on swamp reclamation but the work at the present rate of progress is likely to last some 20 years; whereas a dredger would reclaim the dangerous area in a year and at less cost. Measures were in train in 1915 to borrow a dredger from Burma but collapsed owing to financial reasons. In the autumn of 1916 some sepoys became affected with malaria and the matter of the dredger was revived at the instance of the military authorities, but the needs of Mesopotamia had to be met and the question was again put aside. When normal conditions return an effort to procure a dredger must be made.

Aborigines.—5. The attacks by the Jarawas continue and in one case a corner of the tramway line in the Wimberleygunj valley, which is frequently used by the officials of the Settlement, was ambushed and two convicts killed. A forest clearing with subsidiary clearings at right angles is now being made into the tracts occupied by these savages and an expedition will be sent against them next cold weather. They are open to no advances and treat all mankind as enemies.

Nicobar.—6. Owing to the war it was not found possible to fill the post of Deputy Superintendent of the Nicobars. Progress is being made by the merchants in the realisation of their debts without complaint by the people, and there is reason for hope that the debts will be cleared within the five years period fixed. The royalties on exports at the rate of 5 per cent. *ad valorem* realised R9,228, and licenses to traders R1,924. Trade was dull owing to the war and the total value of produce exported was approximately R1,01,145. The possible development of the islands was reported on by two officers after a tour of inspection. It seems probable that a large tract of fertile land is available in the island of Katchal and further enquiries will be made when an officer is forthcoming for the post of Deputy Superintendent.

CHAPTER XVIII.—NATIVE STATES HAVING DIRECT POLITICAL RELATIONS WITH THE GOVERNMENT OF INDIA.

HYDERABAD.

Agricultural Conditions.—1. The prosperity of the State and the condition of the people depend chiefly upon the character of the monsoon season. The rainfall during this season in 1916 was copious and well distributed, so that there was every reason to anticipate good harvests and general prosperity. Unfortunately, in the early part of November when the crops are ripening and require sunshine, there was extremely heavy and destructive rain. Nearly half the cotton crop was ruined while oil seeds and food grains were also seriously injured. Further, in some districts, such as Mahbubnagar, very extensive damage was done to the tanks, upon which the cultivation of the rice crop depends; some villages were even destroyed by floods caused by the bursting of tanks; fortunately there was no loss of human life, but considerable time will be required to repair the breached tanks and restore these areas to their former condition of prosperity.

The effect of this disaster was not, however, so serious as would have been the case in an ordinary year. Owing to the high prices prevailing for the staple articles of export and particularly for cotton, the cultivators on the whole received in exchange for their damaged crops very nearly as much as they would have got for a full crop in peace time; in fact, it may be said that the war prices saved the situation. On the other hand, for those classes who do not grow their own food, the year was a difficult one in many respects; for in addition to food prices being at a high level, the price of clothes of all kinds, including country-made cloth, was nearly double the price prevailing before the war. Not only this, the general dearness of living extended to practically every article of consumption.

The activities of the Agricultural department were, however, very slightly affected by the discouraging conditions of the season. Over 60,000 acres were sown with the indigenous long staple cotton, with which the department are attempting to replace the short staple brought here from the North. In the preceding year, 38,000 acres were under long staple, so that the area has nearly doubled and success appears to attend this important experiment. Further, the Agricultural department have now succeeded in growing sugarcane without the use of props in those districts where props were universally used before. As 10,000 props were often required for one acre, the saving by discarding props is obviously considerable. There has also been some progress with the silk-worm industry. Agricultural associations are now springing up in various parts of the State, and people are learning to turn to the department for information.

Public Health.—2. The difficulties, to which the people were exposed on account of unseasonable rain and high prices, were still further aggravated by an extremely severe epidemic of plague. In Hyderabad City alone, no less than 14,053 persons died of this disease between the months of October and April although O. S. ₹5,50,000 were spent on plague preventive measures in the City alone. In the districts the epidemic was no less severe, and in out-of-the-way villages the suffering was very great as it was impossible to render these people any material assistance.

The results of this visitation were far-reaching and extended to almost every department of the State. Progress on the more important works was seriously delayed and schools and courts were closed for several months. Numerous temporary hospitals to deal with plague were opened at the capital and in the districts. Apart from the loss of life and the general suffering, there was a complete dislocation of business during the latter half of the period under review. The year was an extraordinarily unhealthy one for cattle and cattle disease was prevalent in nearly every district.

Military.—3. One regiment of Imperial Service Cavalry was on active service during the whole of the year in Egypt.

The pecuniary assistance rendered to the allied cause included a donation of fifteen lakhs to the Anti-Submarine Campaign in addition to three lakhs per mensem for land forces.

Trade.—4. Trade statistics for the British India official year are not available, but it is fairly certain that exports largely exceeded imports, and that the gross value of the principal commodities of exports and imports was normal while the quantity and bulk were below normal. The export trade was delayed for some time in 1917 by the diversion of railway wagons, which ordinarily carry cotton, to the Bengal-Bombay route where extra wagons were required to make good the shortage of coal. It is probable that a certain proportion of the normal exports of the year 1916-1917 will appear in the statistics of 1917-1918. The Secunderabad-Gadag Railway was opened as far as Wunparti Road—a distance of 104 miles. The remaining sections of the line cannot be built till after the war.

Education.—5. Despite the epidemic of plague, real progress was made with primary education. Several hundred new primary schools were established, and attendance at primary schools increased by at least 15,000 pupils. The number of secondary schools and colleges remained unchanged. Owing to the closing of schools during the epidemic of plague, the results in the higher examinations were not as satisfactory as could have been wished; this was particularly the case in examinations for the B. A. degree of the Madras University. A number of new primary schools for girls were opened. In the Middle School and Cambridge Local Examinations, the girl candidates were fairly successful.

Mysore.

The Mysore Representative Assembly was granted the privilege of a second session, in addition to the Dasara Session, from this year. Twelve Regulations were passed by the Legislature of the State.

His Highness the Maharaja contributed a sum of Rs. 10 lakhs towards the expenses of the war in addition to the 52 lakhs previously contributed. His Highness' Government contributed 35 lakhs of rupees to the War Loan of the Government of India. The total contribution of the State including the Civil and Military Station, Bangalore, to the War Loan is estimated at about R75 lakhs. The Imperial Service Lancers and Transport Corps continued in the field during the year.

The rains were ample and the seasonal conditions favourable to agriculture. The outturn of the important crops was normal and prices remained high as before. The total Land Revenue was R126 lakhs and nearly 87·6 per cent. of it was collected. Forest, Excise, Registration and Stamp Revenues showed an increase.

The birth-rate for the year was 20·31 *per mille* and the death-rate 16 63. Village Improvement Committees did good work for the improvement of sanitation in villages and the Malnad Improvement Committees in the Malnad. Great attention was paid to the improvement of rural water-supply.

In response to a widespread popular desire, the reservoir at Kannambadi was named 'The Krishnarajasagara' after His Highness the Maharaja. In connection with irrigation improvements gauging stations were established in selected important tanks and rivers for measuring discharges. Penstock pipes were fixed in the Krishnarajasagara Dam to generate electric power to serve as a reserve for the Mysore Power supply and for other purposes. Portions of the Kolar District Railway and Chikballapur Light Railway were completed and opened for traffic. The mines on the Kolar Gold Fields kept up their normal level of work and output in the face of great difficulties caused by the War. The schists of the Western Ghats were examined for iron ores. Certain samples of Mysore iron ores were sent for being tested to the Electrical Metals, Limited, London. Experiments were conducted with a view to the economic utilisation of bauxite. Enquiries were made into the manufacture of the chemical and commercial products of limestones. A preliminary investigation was made of the magnesite and chrome ores available in the State.

The Faculties of Arts and Sciences were constituted in the Mysore University. Boards of studies were formed as also an Audit Board, the Extension Lecture Board, the Publication Board and the Residence of Students' Committee. Eighteen Committees were constituted for the consideration of several important subjects. A Committee inspected all the Collegiate High Schools

in the State. Four Industrial Schools and two Normal Schools were newly opened. A sum of one lakh of rupees was sanctioned for scholarships to pupils of the educationally backward classes. The number of educational institutions as well as of pupils under instruction increased in all grades, and particularly in the primary grade. The percentage of pupils under instruction to the population of school age was 38. The Compulsory Education Scheme was in force in 68 centres. Provision was made for the advancement of the education of women and girls, of adults, of Mahomedans and of Panchamas and other classes. Four Commercial Schools were newly opened.

Rural Science instruction was introduced in four schools. Demonstration work to popularise improved implements was carried out on a large scale. Scientific experiments and investigations were carried on in four agricultural farms. A detailed scheme was prepared for developing sericulture and a central sericultural school was opened. The Co-operative movement was very popular and there was one Co-operative Society for every 17 villages and every 5,950 persons in the State.

Baroda.

The gross receipts during 1916-17 amounted to a little over 2 crores of rupees, and the disbursements to a little more than a crore and a half. The rainfall during the year, being very satisfactory, was on the whole favourable to all kinds of crops. The yield of crops was distinctly better and the prices of foodstuffs lower than those of the preceding year of drought.

The number of Co-operative Societies continued to be the same. Instead of expanding the movement, efforts were made to improve the working of the existing Societies, especially those that were weak and inefficient. The Baroda Central Bank has been doing good work, having advanced more than a lakh and a half of rupees to various Societies.

An Agricultural and Industrial Exhibition was held in January 1917 on a fairly large scale. Nearly 30,000 exhibits were received and special attention was paid to practical demonstrations and shows.

The number of births exceeded deaths by nearly 8,500. Medical relief was, as usual, continued unstinted among other things quinine being distributed free in malarial areas.

The year was marked by progress in the direction of spreading education among the masses. The creation of the Ecclesiastical Department was a remarkable feature of the year, its main duties being to conduct Sanskrit Pathshalas and spread religious and moral education. Three graduates in Science were appointed to deliver lectures explaining natural Phenomena, with a view to dispelling popular superstitions regarding miracles. The work of collecting old and valuable manuscripts has been satisfactorily progressing, the Central Library now possessing over 5,000 Sanscrit manuscripts.

Kashmir.

A well distributed rainfall resulted in abundant *kharif* crops and enabled the prohibition against export of grain from the Jammu Province to be temporarily suspended. The *rabi* harvest was a total failure in unirrigated submontane tracts, but anything approaching widespread distress was prevented by a normal outturn from irrigated lands. Prices of local produce continued to evince an upward tendency, due to sympathy with the prevailing high prices of all imported goods, rather than to any actual scarcity. Rural sanitation is in a backward condition, but the country was free from epidemics and the mortality from Plague in Jammu was only 1-17th of the figure for the preceding year.

Increased outturn of silk and cocoons, for which high prices were realised in Europe, and larger sales of timber, were the principal factors in an unprecedented revenue of 150½ lakhs and served to convert an anticipated financial deficit into a surplus of 24¼ lakhs.

Trade expanded in value from 281 lakhs to 355 lakhs, due in large measure to the exceptionally mild winter, which enabled traffic to be maintained throughout the year.

Education absorbed 7¼ lakhs; medical relief 2¼ lakhs; and 1½ lakhs were expended on sanitation.

The Kashmir Imperial Service Rifles remained on active service in East Africa, and added to their reputation as efficient and valuable fighting units. The State also despatched an Imperial Service Battery for service in East Africa.

Sikkim.

The year was a prosperous one. Harvests averaged better than in the previous year, and prices were, in consequence, lower. The trade figures were also slightly better than last year. Public health was good and the State continued free from serious epidemics. There was much recruiting both for the Army and for military police forces. His Highness the Maharaja took an active part in all matters affecting the welfare of the State and in those branches of the administration over which he exercises independent control. To the latter category were added, during the year under report, the management of police and jails and the departments of income-tax and excise.

Rajputana.

The agricultural conditions to the Rajputana States during the period under report were generally good, and the year was a prosperous one. The copious monsoon rains of 1916 produced good harvests. Public health was also on the whole good, but there were slight outbreaks of cholera in some States in the summer of 1916.

The wolfram mines at Digana in Marwar worked satisfactorily, and altogether over 93 tons of wolfram were exported up to September 1917. The Imperial Service troops of Jodhpur, Bikaner, Alwar and Bharatpur remained on active service, and these and the other States continued to support Government generously by furnishing recruits and by assisting in other ways towards the prosecution of the War.

Ajmer-Merwara (British Territory).

The year 1916-1917 opened under most unfavourable agricultural conditions. The monsoon had failed in the preceding year, and it had been found necessary to declare Scarcity in the Merwara Sub-District in March 1916. Prospects were generally depressing throughout the District, nearly all the tanks were empty and the *rabi* harvest was in consequence extremely poor. By the month of June the number of relief works in Merwara had risen to ten, and a failure of the approaching monsoon would have made the declaration of Famine inevitable. Fortunately abundant rain was received in July, and in the following months the monsoon was all that could be desired. The scarcity works were all closed by the end of August, Ajmer-Merwara enjoyed an excellent *kharif* and distress gave place to prosperity.

As a result of the favourable monsoon the total revenue (Imperial and Local) of Ajmer-Merwara rose to R17,80,057, an increase of nearly rupees three lakhs as compared with that of the preceding year. The expenditure incurred also shows a substantial increase amounting to R20,54,671—as against R15,22,656—in the year 1915-1916: this is due to an outlay of some five lakhs of rupees in connexion with the relief of scarcity.

Central India.

Both the autumn and spring harvests were excellent throughout Central India except in the Bhopal Agency and the Guna Sub-Agency where the yield of the autumn crops was reduced to half by excess of rain. Prices of food grains were high. Labour was scarce as usual and with grain so dear wages were high: in fact, at the present time labour is the most serious problem in the development of Central India.

Public Health.—2. All the Agencies, except Baghelkhand and Bundelkhand, were visited by plague, the only respite being in the hot weather. The

incidence was severest in Indore where there were 1,777 deaths out of 2,396 in the Province. Fortunately, people now evacuate their houses as soon as rats begin to die, and the increasing popularity of inoculation is shown by over 9,000 persons having been inoculated in Indore. Cholera, in all parts of Central India, accounted for 5,474 deaths against 795 in 1915, the worst months being July and August. Small-pox was prevalent, but reliable figures cannot be given. The birth-rate shows a further fall from 11·81 to 11·51 *per mille* but the statistics are unreliable The death-rate increased from 9·55 to 10·60 *per mille*.

Opium.—3. The principal feature of the year was the inception of a scheme for States in Malwa to revive cultivation, to a limited extent and under adequate safeguards, for the production of crude opium for sale to Government at contract prices which will pay both the cultivators and the States The control and taxation of the local consumption of opium continues to improve, all States, except two (Indore and Jaora), having introduced direct taxation

Education.—4. The number of boys in the Daly College has begun to rise again slowly in spite of the higher scale of fees; but the College had to be closed for three months on account of plague, and studies were further interrupted by a severe outbreak of malarial fever. There are now over 200 students in the King Edward Medical School which supplies the Darbars, both of Central India and Rajputana, with their medical staffs. Admission has recently been restricted to Matriculates, and at the close of their course students will in future appear for the Licentiate Examination of the Bombay College of Physicians and Surgeons.

Agricultural Development.—5. The States in the Malwa Agency associated themselves during the year with the scheme of a Joint Agricultural Adviser (first adopted by Gwalior, Indore, Bhopal, Datia and Dhar), and it is already bearing fruit. The most advanced State is naturally Gwalior, where the Darbar have built a Research Institute, founded Experimental and Demonstration Farms with the necessary staff, and established a Department of Agricultural Engineering. But all States are progressing according to their means and the main agricultural problems of Central India are now being seriously dealt with on modern lines.

Industrial Development.—6. For the development of the industries and resources of the Gwalior State, His Highness the Maharaja Scindia founded during the year the 'Gwalior State Trust', incorporated under the Gwalior State's Companies Act, with an authorized capital of R10,000,000 of which the first issue of R1,000,000 has been taken up by His Highness. In the management of the Trust, the Board of Directors are to have the assistance of an Advisory Board consisting of representative officials of the State. It has already resuscitated the Gwalior Paper Mills, which previously had been a failure.

The Eastern States of Central India Export Trust ('Esociet'), founded in the previous year by the Darbars of Datia, Panna, Chhatarpur, Nagod and Maihar, have increased their capital from R2,00,000 to R3,72,000. They have already done valuable work in the testing and development of indigenous tanning agents, with the result that the Government of India have acquired some of their processes and have established a Tannin Research Factory at Maihar with their co-operation.

War.—7. Major His Highness the Raja of Ratlam remained at the front throughout the year, and the other Ruling Princes and Chiefs of Central India contributed towards the war to the best of their ability in men, materials and money. Under the first head, the various Imperial Service Contingents remained mobilised throughout the year and did good service on several fronts, as also on garrison duty in India. The State troops assisted to train remounts for the Army, and in the case of Gwalior, furnished drafts for Imperial Service Troops: but, otherwise, the question of recruitment is a very difficult one in Central India owing to the scarcity of population and the absence of all military tradition. Under the second head, the States continued to maintain the Hospital Ship "Loyalty." It had cost approximately R50 lakhs up to the 31st March 1917, the funds being advanced by His Highness the Maharaja Scindia, pending final adjustment between the States. His Highness the Maharaja of Datia

has opened, at his own expense, a War Hospital for Indian Troops at Datia, while at Indore hospitals for both British and Indian Troops are maintained by the Ratlam, Barwani, and Ali-Rajpur Darbars. All States have supported the War Loans and equally the Joint War Committee and Imperial Indian Relief Fund. Details of individual War contributions are too numerous to record. But from the lavish gifts of the Maharaja Scindia, whose aid may be set down at not less than one crore of rupees, to the widow's mite of the poorest all are offered in the same spirit of loyalty to the King-Emperor, faith in the justice of our cause, and determination to persevere till victory is won.

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CONTENTS.

CHAPTER.		PAGE.
I	Introductory	1—12
II	Finance	13—15
III	Legislation	16—17
IV	Madras	18—24
V	Bombay	25—32
VI	Bengal	33—39
VII	United Provinces	40—44
VIII	Punjab	45—48
IX	Burma	49—53
X	Bihar and Orissa	54—59
XI	Central Provinces	60—62
XII	Assam	63—67
XIII	North-West Frontier Province	68—71
XIV	Baluchistan	72—75
XV	Coorg	76—77
XVI	Delhi	78
XVII	The Andaman and Nicobar Islands	79—80
XVIII	Native States having direct political relations with the Government of India :—	
	Hyderabad	81—82
	Mysore	82—83
	Baroda	83
	Kashmir	83—84
	Sikkim	84
	Rajputana	84
	Ajmer-Merwara (British Territory)	84
	Central India	84—86

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